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DEPARTMENT OF COMMERCE
BUREAU OF FOREIGN AND DOMESTIC COMMERCE
E. E. PRATT, Chief

SPECIAL CONSULAR REPORTS—No. 73

PAPER AND STATIONERY TRADE OF THE WORLD

Compiled from Consular Reports
and Supplemented by

GROSVENOR DAWE, Commercial Agent

WASHINGTON
GOVERNMENT PRINTING OFFICE
1915

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LETTER OF SUBMITTAL.

Department of Commerce,
Bureau of Foreign and Domestic Commerce,
Washington, May 20, 1915.

Sir: There is submitted herewith a series of consular reports dealing with the world's trade in paper and stationery. The original reports have been selected and edited by Commercial Agent Grosvenor Dawe, who also prepared the introduction and the three appendixes. Some of the most promising markets have been treated exhaustively on account of the prominent place the United States may soon take in the trade.

Respectfully,

E. E. Pratt,
Chief of Bureau.

To Hon. William C. Redfield,
Secretary oj Commerce.

PAPER AND STATIONERY TRADE OF THE WORLD.

INTRODUCTION.

The consular reports on the paper trade of the world that are brought together in this monograph were prepared in response to the following circular of instruction issued by the Department of State on December 5, 1913:

To the American consular officers.

GENTLEMEN: The Department has been requested to obtain reports on the market in foreign countries for paper of all classes, and you will please prepare such reports in duplicate, without transmitting dispatches, and using the same subject heading as given on this circular.

In view of the occasional difficulties arising from attempts to reconcile discrepancies in the reports from the various consular districts of a country, it is also desired that there be made national reports on the market for paper of all classes. Each principal consular officer is requested to send a copy of his report to the officer specially designated in the accompanying list, as the one to make the national report.

These reports should be in a form suitable for publication and should follow the outline as given below. They should not be in the form of replies to interrogatories.

1. General statement as to the character and source of the paper supply with special reference to the possibility of selling American products. Consular officers having jurisdiction over a whole country should cover that country in their report.

2. Market requirements: (*a*) Amount of each kind of paper used in your district and kinds most in demand. Forward samples where convenient. (*b*) Standard sizes of paper, and special sizes in demand, and for what purposes. Other special requirements as to quality, weight, finish, etc., peculiar to your district or country. Unless some other classification is followed in the particular country or section the following may be used: (1) Writing paper, including bond, ledger, and linen papers; (2) book papers, including Bible or India paper, etc.; (3) news paper; (4) wrapping, fiber manila, bogus manila, wall, kraft paper, etc.; (5) tissue, blotting, cover, cloth-lined, parchment, wax, and carbon papers; (6) boards of all kinds, such as strawboard, boxboard, pressboard, bristol board, etc.; (7) all other kinds. (Is the paper in general use for social and commercial correspondence of high, medium, or low grade?)

3. Home production: (*a*) Raw materials available for paper manufacture, such as trees, other vegetable fibers, and rags and other waste and their relative cost to the manufacturer. (*b*) Number and output of paper and pulp mills in your district. Cost and efficiency of labor in mills. Source of equipment for mills. (*c*) Wholesale prices of local and imported products. (*d*) Statistics of paper exports, by classes and countries.

4. Import trade: (*a*) Statistics of imports, by classes and countries, and an analysis of the statistics with especial regard to the possibilities of promoting American trade. (This information to be supplied by consular officers reporting for entire country, and so far as possible by the several consular officers for their respective districts.) (*b*) Trend of import trade in recent years and cause of any change in sources of supply. (*c*) Special factors influencing import trade, such as shipping facilities and customs duties. (*d*) Method of quoting prices and terms usually granted to importers. (*e*) Tariff schedules are not desired, as these will be compiled in the Bureau of Foreign and Domestic Commerce at Washington, but comment may be made on the influence of customs duties on the import trade.

5. It is expected that your reports will be as complete as the possible market for American paper seems to justify, and any points of interest in the paper trade or manufacture not covered by this outline should be included, and in districts where the paper or pulp industries are of considerable importance a more extended report than is indicated by this instruction is desired.

6. Information (confidential) for use by the Bureau of Foreign and Domestic Commerce: (*a*) Names of persons and firms who might become agents for American exporters on separate sheets). (*b*) Names of large users of paper (on separate sheets). (*c*) Names of Government departments making purchases of paper and methods and extent of purchases (to be supplied only by consular officers in cities in which such purchasing departments are located and on separate sheets).

PREPARATION OF THE REPORT.

Responses to the foregoing instructions began to arrive at the Bureau of Foreign and Domestic Commerce early in 1914, although some have been received as recently as May, 1915. A large portion of the material from which this volume is prepared, however, was written before the outbreak of hostilities in Europe, and the fact that most of the reports are based on normal conditions adds rather than detracts from their value, as most manufacturers are interested in the general competition to be met and obstacles to be overcome.

Although reports are included from practically all parts of the world, specially extended treatment has been given the paper industry in certain countries, notably Sweden and Norway, because of their rapidly growing importance as manufacturers; China, because of the immense potentialities indicated relative to the development of a reading class aroused by political changes; Russia, because the satisfactory rise in educational standards and the evolution of a middle class mean an increased market that the country itself seems unable to supply at present; the United Kingdom, because of its dependence on other countries for raw materials; Germany and Austria-Hungary, because of the abnormal conditions to which their export trade is subjected at present; Argentina, because of the marked possibility of increased trade with South America; and Spain, because of the trade suggestions scattered through the report of the consul general.

CULTIVATING NEAR-BY MARKETS.

A careful study of the following table will indicate that in general a country does best by cultivating the territory near-by. For instance, Germany's field of greatest export activity and most impressive totals was, in 1912, the continent of Europe and chiefly those countries actually or nearly contiguous. The only points to which it exported paper products of a million dollars or over in 1912, outside the continent of Europe, were Argentina and the United States.

A similar indication of the influence of propinquity will be found in the exports from Austria-Hungary. The nearness of the dual monarchy to the Mediterranean countries accounts for a large proportion of its export trade. Its trade with Germany is also very great. Apart from the territory indicated above Austria exported to no country, except British India, a total of more than $250,000 worth of paper and paper products in 1913.

Countries to which exported.	Exports from Germany (1912).	Exports from Austria-Hungary (1913).	Exports from United Kingdom (1913).
Austria-Hungary	$1,248,743		$34,552
United Kingdom	6,261,238	$210,718	
Germany		1,116,861	397,105
British India	379,100	265,710	1,888,202
British South Africa	85,650	3,382	958,213
Canada	130,908	1,824	1,007,365
Australia	438,715	32,094	2,712,586
New Zealand	43,555	340	718,781
Norway	266,197	4,550	49,638
Sweden	332,626	2,871	67,157
Denmark	585,440	4,379	51,585
Netherlands	2,172,162	18,663	285,663
Belgium	2,044,416	89,470	456,477
France	1,091,799	16,229	1,052,137
Switzerland	1,312,008	99,398	56,938
Spain	273,497	2,676	46,231
Portugal	143,075	219	17,188
Italy	599,308	719,609	36,498
Greece	61,074	196,558	22,458
Bulgaria	54,261	142,174	783
Servia	91,976	147,747	10
Roumania	79,810	120,105	7,844
Russia	434,821	36,620	54,018
Turkey	196,120	667,927	37,472
Egypt	85,163	504,023	98,790
Dutch East Indies	125,555	28,907	132,855
Philippines	67,887		2,545
China	130,422	195,974	378,127
Japan	715,618	151,786	739,708
Brazil	855,530	123,040	108,522
Uruguay	75,430		43,024
Argentina	1,600,348	62,972	252,571
Chile	308,536	10,852	136,262
Peru	85,650	705	27,252
Venezuela	30,658		3,119
Ecuador	28,955		1,012
Colombia	46,961	2,652	6,910
United States	2,217,177	85,407	639,458
Mexico	118,499	5,620	10,219
Cuba	224,345	2,968	1,956
Other countries	614,415	58,437	883,982
Total	25,657,647	5,133,476	13,425,213

A similar test applied to the exports of the United States is indicated in the table of exports on page 444. Our greatest market is North America, and our best customer is Canada. Nearness should also influence the trade of the United States with Central America, the West Indies, and a considerable portion of South America.

Concurrently with the influence of national nearness, in certain specified countries there has also been an influence of political affiliation. This is most definitely shown by the exports of paper goods from the United Kingdom. Outside of the British possessions, France alone appears to provide an outlet for more than $1,000,000 worth of paper goods exported by the United Kingdom, and other good customers of the United Kingdom are Japan, Belgium, China, Netherlands, and Argentina.

A further indication of the influence of political affiliation is given in the report from Chosen, which shows that Japan practically controls the market.

IMPORTS OF PAPER INTO THE UNITED STATES.

The table that follows contains statistics showing the imports of paper into the United States for the fiscal years 1913 and 1914 and for the first nine months of the fiscal year 1915, which are the latest statistics available:

Articles.	Twelve months ending June—				Nine months ending March—	
	1913		1914		1915	
	Quantity.	*Value.*	*Quantity.*	*Value.*	*Quantity.*	*Value.*
Paper stock, crude (except wood pulp):						
Rags (other than woolen) lbs. free	245,113,327	$3,413,165	180,906,309	$2,552,462	79,986,963	$1,265,934
All other (including grasses, fibers, waste, etc., used chiefly for paper making)...free		3,858,240		6,018,745		2,496,682
Total		7,271,405		8,571,207		3,762,616
Paper, and manufactures of:						
Books, music, maps, engravings, etchings, photographs, and other printed matter—						
Free		3,908,223		3,994,869		2,966,116
Dutiable		2,647,333		2,649,396		1,570,133
Total		6,555,556		6,644,265		4,536,249
Lithographic labels and prints (except post cards)....dut		1,798,283		1,766,371		1,023,540
Paper hangings.........dut		1,035,718		933,777		392,109
Photographic...........dut		1,238,642		1,352,143		900,943
Printing paper for books and newspapers—						
Valued at not above 2¼ cents per pound. lbs. free	234,619,685	4,512,807	535,710,929	10,365,043	481,781,863	9,337,470
Valued at not above 2¼ cents per pound. lbs. dut	60,338,886	1,168,302	[a]20,430,119	[a] 400,065		
Valued at above 2¼ cents and not above 4 cents per pound..........lbs. free			[a] 664,240	[a] 20,021		
All other..........lbs. dut	6,338,734	352,914	6,053,429	290,530	3,690,732	170,135
Total printing paper. lbs.	301,297,305	6,034,023	562,836,717	11,075,659	485,472,595	9,507,605
Souvenir post cards......dut		484,481		464,058		205,285
Surface-coated......lbs. dut	5,030,784	597,334	6,925,505	620,061	3,902,138	339,709
Wrapping..........lbs. dut		741,469	36,515,554	1,028,500	25,363,948	713,771
All other paper and paper board valued at not above 4 cents per pound...... free		210,298		[a] 366,051		
All other...... free				[b] 35,416		62,842
All other...... dut		2,842,841		3,277,539		2,283,958
Total paper, and manufactures of		21,538,645		27,563,840		19,966,014
Wood pulp		16,165,316		17,023,338		17,061,771

[a] From July 1 to Oct. 3, 1913, inclusive.

[b] From Oct. 4, 1913, to June 30, 1914.

The statistics in the next table afford a clear idea of the increasing importance of the American imports of paper and paper-making materials:

Years ending June 30—	Wood pulp.	Paper stock.	Paper, and manufactures of.	Years ending June 30—	Wood pulp.	Paper stock.	Paper, and manufactures of.
1902	$2,059,092	$2,770,255	$8,356,340	1909	$8,629,263	$3,638,034	$17,259,195
1903	3,387,770	3,015,084	9,056,974	1910	11,768,014	5,206,877	17,536,755
1904	3,602,668	2,900,713	9,848,273	1911	13,980,357	5,481,680	18,626,880
1905	4,500,965	3,796,595	10,213,496	1912	14,218,922	5,918,358	17,300,349
1906	4,584,942	4,374,464	12,598,709	1913	12,251,853	7,271,405	21,538,645
1907	6,348,857	5,580,528	17,179,194	1914	17,023,338	8,571,207	27,563,840
1908	7,813,326	3,675,926	18,259,751				

The bulk of the imports of wood pulp is supplied by Europe, whereas Canada supplies nearly all of the $11,075,659 worth of printing paper purchased abroad. Europe, however, supplies practically all of the finer grades of paper imported. An idea of how the import trade of the country was divided between North America (Canada) and Europe in 1914 may be gained from the table that follows:

Kinds.	From Europe.	From North America.	From all countries.
Paper stock	$7,111,566	$522,847	$8,571,207
Books, music, maps, etc	6,259,324	231,804	6,644,265
Lithographic labels, etc	1,750,241	12,539	1,766,371
Paper hangings	844,657	1,790	933,777
Photographic paper	1,351,956	177	1,352,143
Souvenir post cards	458,281	1,744	464,058
Surface-coated paper	616,574	3,057	620,061
Wrapping paper	709,632	318,653	1,028,500
All other paper	2,674,569	446,040	3,679,006
Wood pulp	11,114,572	5,908,766	17,023,338
Printing paper	149,869	10,634,992	11,075,659

EXPORTS OF AMERICAN PAPER.

The exports of paper and paper products for the fiscal years 1913 and 1914 and the first nine months of the fiscal year 1915 are shown in the table that follows:

Articles.	Twelve months ending June—				Nine months ending March—	
	1913		1914		1915	
	Quantity.	*Value.*	*Quantity.*	*Value.*	*Quantity.*	*Value.*
Paper stock: Rags, n. e. s., and other (except wood pulp). lbs	32,021,038	$635,093	40,646,323	$740,294	20,458,752	$345,095
Paper, and manufactures of:						
Bags	....	436,799	....	422,075	....	336,956
Books, music, maps, engravings, etchings, photographs, and other printed matter	....	10,092,719	....	9,639,860	....	6,227,235
Boxes and cartons	....	553,021	....	459,459	....	297,339
Carbon paper	....	386,877	....	505,203	....	229,655
Paper board, strawboard, etc	....	....	....	....	....	457,288
Paper hangings	....	482,836	....	453,412	....	190,693
Playing cards	....	319,786	....	330,194	....	149,222
Printing paper—						
News print. lbs	100,426,614	2,450,520	88,966,738	2,177,483	99,084,084	2,418,450
All other. lbs	28,633,615	1,606,699	28,902,184	1,612,370	21,640,115	1,091,871
Total printing paper, lbs	129,060,229	4,057,219	117,868,922	3,789,853	120,724,199	3,510,321
Wrapping paper. lbs	14,116,585	578,711	14,133,097	532,657	13,354,055	539,450
Writing paper and envelopes	....	1,351,226	....	1,179,229	....	799,692
All other	....	3,520,109	....	3,351,692	....	1,704,298
Total paper, and manufactures of	....	21,779,303	....	20,663,634	....	14,442,149
Wood pulp. lbs	41,475,567	764,020	26,961,254	529,741	14,963,200	296,935

The variations in the exports of paper stock and wood pulp from the United States since 1902 have ranged from a total of nearly $3,000,000 to but little more than $500,000. The highest point was reached in 1911, since when there has been a considerable falling off, as shown in the following table:

Years ending June 30—	Paper stock.	Wood pulp.	Years ending June 30—	Paper stock.	Wood pulp.
1902	$73,186	$740,103	1909	$975,502	$448,960
1903	89,710	445,228	1910	1,921,121	360,057
1904	110,948	593,474	1911	2,597,539	371,233
1905	147,863	473,585	1912	1,330,077	388,906
1906	211,853	587,878	1913	635,093	764,020
1907	485,112	498,552	1914	740,294	529,741
1908	733,775	519,625			

Prior to 1910 the classification "Printing paper" in the official United States statistics included news print, but since that year news print has been given separately and other printing paper classified as "All other kinds of printing paper." The exports of paper of all kinds for the 13 years ended with 1914 are shown in the following table; there has been no decided increase in this line:

Years ending June 30—	Printing paper.	News print.	All other printing paper.	All other paper.
1902	$2,920,616			$3,346,046
1903	2,613,117			3,408,954
1904	2,572,447			3,630,165
1905	3,059,444			3,674,175
1906	3,666,798			4,324,473
1907	3,514,281			4,659,606
1908	2,140,352			4,376,593
1909	2,178,333			3,953,451
1910	2,766,579			4,441,742
1911		$2,434,961	$1,254,589	4,801,576
1912		2,501,529	1,249,330	4,990,033
1913		2,450,520	1,606,699	3,520,109
1914		2,177,483	1,612,370	3,351,689

The exports of other paper products, such as books, maps, and postal cards, are shown in the next table. The increase in the exports of books, maps, engravings, etc., since 1902 has been steady and very satisfactory, the sale abroad of writing paper and envelopes has increased steadily but slowly, and the exports of paper hangings and postal cards have done little more than hold their own.

Years ending June 30—	Books, maps, engravings, etc.	Paper hangings.	Postal cards.	Writing paper and envelopes.
1902	$3,997,977	$301,339		$744,029
1903	4,442,653	256,243		901,700
1904	4,347,304	243,417	$210,518	887,181
1905	4,844,160	304,338	225,032	975,099
1906	5,839,452	311,318	257,897	975,579
1907	5,813,107	297,357	184,747	1,200,742
1908	6,107,053	283,762	175,217	1,088,782
1909	6,351,445	266,735	195,851	1,068,769
1910	7,088,994	297,307	221,532	1,267,117
1911	8,853,998	372,375	297,829	1,200,168
1912	8,840,683	399,121	284,931	1,192,423
1913	10,092,719	482,836	319,786	1,351,226
1914	9,639,860	453,412	330,194	1,179,232

A study of the preceding tables will bring to light the fact that the exports of paper and manufactures of paper from the United States to the rest of the world is second only to the exports of Germany, the figures shown elsewhere indicating that Germany in 1912 exported $25,657,647 worth; the United States in 1914 exported $20,663,634 worth. Of paper stock the United States exported $740,294 worth and of wood pulp $529,741 worth. The United Kingdom during 1913 exported $13,425,213 worth.

It would, however, convey a wrong impression if this statement of the matter were left exactly as it is, for our imports of paper and manufactures of paper, of paper stock, and of wood pulp in 1914 come to the enormous total of $53,158,385, divided as follows: Paper and manufactures of paper, $27,563,840; paper stock; $8,571,207; wood pulp, $17,023,338.

GROWTH OF INDUSTRY IN THE UNITED STATES.

The preparation of this volume provides an opportunity to draw attention to the marked development that has taken place in the paper and wood-pulp industry, as well as in the printing and publishing industry, in the United States.

In 1899 there were 763 paper and wood-pulp establishments, employing 49,646 wage earners, with a total production of $127,366,000. In 1904 there were 761 establishments, employing 70,051 wage earners, that produced $188,715,000 worth of goods. In 1909 there were 777 establishments, 81,473 wage earners, and a production of $267,657,000 worth of goods.

The table that follows gives details of the industry as it existed in 1909:

Paper and wood-pulp industry.	Total.	Mills making—		
		Paper only.	Pulp only.	Both paper and pulp.
Number of establishments	777	538	81	158
Persons engaged in the industry	81,473	40,807	6,554	34,112
Proprietors and firm members	250	215	26	9
Salaried employees	5,245	2,943	390	1,912
Wage earners (average number)	75,978	37,649	6,138	32,191
Primary horsepower	1,304,265	(1)	(1)	(1)
Capital	$409,348,505	$148,021,260	$38,336,179	$222,991,066
Expenses	$237,310,150	$115,341,621	$19,205,710	$102,762,819
Services	$50,314,643	$24,532,636	$4,027,939	$21,754,068
Salaries	$9,510,141	$5,255,161	$652,135	$3,602,845
Wages	$40,804,502	$19,277,475	$3,375,804	$18,151,223
Materials	$165,442,341	$79,692,160	$13,657,150	$72,093,031
Miscellaneous	$21,553,166	$11,116,825	$1,520,621	$8,915,720
Value of products	$267,656,964	$129,381,198	$21,567,432	$116,708,334
Value added by manufacture (value of products less cost of materials)	$102,214,623	$49,689,038	$7,910,282	$44,615,303

[1] Not reported separately.

There were 23,814 printing and publishing establishments in 1899, employing 195,260 wage earners, and producing $395,186,629 worth of goods. In 1904 the total number of establishments had increased to 27,793, the number of wage earners to 219,087, and the value of production to $552,473,353, while in 1909 the number of plants had reached a total of 31,445, the number of employees to 258,434, and the value of products to $737,876,087.

The statistics of the printing and publishing industry, as determined by the census of 1909, are shown in the following table:

Printing and publishing industry.	Total.	Printing and publishing industry.	Total.
Number of establishments	31,445	Expenses	$619,158,045
Persons engaged in the industry	388,466	Services	268,086,431
Proprietors and firm members	30,424	Salaries	103,458,251
Salaried employees	99,608	Wages	164,628,180
Wage earners (average number)	258,434	Materials	201,774,590
Primary horsepower	297,763	Miscellaneous	149,297,024
Capital	$588,345,708	Value of products	737,876,087
		Value added by manufacture (value of products less cost of materials)	536,101,497

LISTS OF NAMES.

According to instructions the consuls general and consuls forwarded as part of their reports various lists, indicating large users of paper, including news; wholesale paper dealers; wall-paper dealers; paper agents; paper-goods manufacturers; paper-supply houses; paper-box manufacturers, etc. These various lists are available in the Bureau of Foreign and Domestic Commerce, but are not included in this volume because the different associations of paper manufacturers in the United States already have in their possession various directories, as follows: "Paper Makers of all Nations," published by Dean & Son, in London, 1912; "Phillips' Paper Trade of the World" for 1914, published in London; and "Lockwood's Directory for 1915," published in New York City. In addition, various directories issued by the Bureau of Foreign and Domestic Commerce supply much of the information in question. All lists are available on request.

SAMPLES OF PAPER.

Samples of the various kinds and qualities of paper referred to in the reports, are on file in the Bureau of Foreign and Domestic Commerce. They will be useful for manufacturers who wish to compete along lines represented by these samples.

EUROPE.

AUSTRIA-HUNGARY.

VIENNA.

From Consul General Charles Denby.

The paper supply of Austria is derived very largely from local production and the industry is an ancient one, as is shown by its having been regulated by law as far back as the year 1754. The consumption of paper assumed great proportions about 1848, and from that time on there has been a steady increase in the number of paper mills in the country.

The export of Austrian paper dates from the year 1870, when domestic overproduction began to be felt. It is at about this date that the trade began to find the supply of rags insufficient and commenced to use plant fibers. To aid the industry an export tax of 9.60 kronen ($1.92) per 100 kilos (220 pounds) was put on rags suitable for paper production, which tax is one of the two Austrian taxes on exports. So effective has this tax been that in the year 1913 there was an export from Austria-Hungary of 1,350 tons of rags and waste for paper manufacture, valued at about $70,000, against an import in the same year of 21,000 tons, valued at over $900,000.

Aside from the rags above referred to, Austria-Hungary has a bountiful supply of woods suitable for manufacture of paper, which supply is kept uniform by a careful system of forestation. This supply of material, combined with cheap fuel and an unsurpassed water power, much of which is in the forests themselves, places manufacture of pulp on the most favorable basis. The resources of Bohemia, of upper and lower Austria, and of Styria in this respect are particularly remarkable.

The Austrian section of this dual Monarchy had a population in 1910 (the last census) of 28,567,898, comprising such classes of people as would be found in the same latitude of the United States, engaged in a great variety of industries and enjoying a high average of prosperity. Paper in all its varieties used for business, social, and general purposes does not differ essentially from that used in the United States. The paper used in social and commercial correspondence is of a high grade, comparing favorably with the best practice in other advanced communities. It is to be remarked that there is not in Austria the same importance attached to the use of high-grade business paper that is felt in the commercial circles of the United States. It is also noticeable that the use of an inferior grade of wall paper is general here, to be explained by the fact that such a large part of the population, including the best classes, live in rented apartments. It is found that owners furnishing their residences are more inclined than landlords to indulge in high-grade wall paper, and amongst this class would the American high-grade article find its best customers.

PRODUCTION OF AUSTRIAN MILLS.

Paper production is from rags for finer grades and from straw and a variety of woods for the cheaper grades. It is estimated that 80 per cent of the output is made of wood pulp, 13 per cent of waste paper, 4 per cent of rags, flax, and hemp, and 3 per cent of straw and rush.

The latest compiled statistics show that there are in Austria 335 firms engaged in paper manufacturing, using 1,337 machines of various kinds. The output of the Austrian industry in 1912 was: Paper, 362,730 tons; paste, 45,946 tons; pulp, 244,312 tons; cellulose, 198,774 tons; being 83 per cent of the output of the Austro-Hungarian Monarchy.

SCALE OF WAGES.

The scale of wages for labor in the mills of Austria is low as compared with American factories, ranging from 30 cents to $1.20 per day, the average being about 60 cents per day for all classes according to character of employment and to locality of mill, not including, however, the specialized work for the finer product.

The mills are equipped almost exclusively with Austrian machinery. There was an import in 1912, chiefly of heavy machinery, and from Germany exclusively, to the value of $112,872. In the same year Austrian paper-manufacturing machines were exported to Germany, the Balkans, and Russia to the extent of about $43,000.

EXPORT TRADE.

[In the place of the statistics furnished by Consul General Denby, it is deemed best to include the export statistics of Austria-Hungary for 1912, set forth by the British Board of Trade in a pamphlet, issued in November, 1914, entitled "Competition with Germany and Austria-Hungary in Neutral Markets; Number 90; Paper, Pasteboard, and Cardboard." The figures follow.]

Country to which exported.	Pasteboard, common, weighing 300 grams or more per square meter (1.05 oz. per 1.19 sq. yd.).		Pressing boards, slate boards, glazed boards of pasteboard.	Fine cardboard (cartons).	All other cardboard (mainly tarred cardboard and carton pierre).	Packing paper weighing 30 grams or more per square meter (1.05 oz. per 1.19 sq. yd.	
	Pasteboard of wood pulp.	Other common pasteboard, including rough rag pasteboard and strawboard.				Not dyed.	Dyed in the pulp or tarred
United Kingdom........	$23,091	$535	....	$194	$97	$15,621	$17,762
Germany................	114,897	34,722	$4,866	973	12,701	99,908	106,356
Other markets:							
Australia............	11,484	....	....	....	....	5,985	267
British India........	2,627	24	....	243	....	141,882	24,867
British South Africa.	....	....	....	....	....	437	....
Canada...............	....	....	....	....	....	97	....
New Zealand........	340	....	....	....	....	....	....
Sweden..............	....	462	....	....	....	....	24
Netherlands.........	5,937	2,457	291	243	48	705	559
Belgium.............	5,105	....	....	72	....	....	....
France..............	1,240	....	....	583	....	1,508	48
Switzerland.........	50,422	1,021	....	9,781	1,581	4,039	316
Spain...............	632	....	....	....	....	608	....
Italy...............	545,048	3,917	....	681	8,613	60,650	6,861
Greece..............	14,915	....	....	....	389	29,782	13,869
Bulgaria............	8,029	48	72	24	2,676	15,962	3,893
Serbia..............	14,453	2,360	....	291	3,601	38,128	1,849
Roumania............	22,483	4,501	778	827	7,956	10,097	510
Russia..............	15,621	4,233	3,503	48	1,216	48	....
Turkey..............	86,915	48	....	583	14,282	111,247	56,548
Egypt...............	34,260	....	....	1,094	....	154,899	77,206
Dutch East Indies...	48	....	....	316	....	492	....
China...............	....	....	....	....	....	73,435	12,896
Japan...............	1,946	....	....	973	....	127,550	3,309
Brazil..............	3,211	....	....	....	....	4,282	....
Argentina...........	35,038	....	....	....	97	2,725	389
Chile...............	....	....	....	....	....	875	....
Peru................	....	....	....	....	....	340	....
United States.......	1,143	....	....	48	486	55,258	948
Mexico..............	....	....	....	....	....	2,238	....
Cuba................	....	437	....	....	....	997	....
Total other markets	860,897	19,508	4,644	15,807	40,945	844,266	204,359
Total to all destinations..........	998,885	54,765	9,510	16,974	53,743	959,795	328,477

Country to which exported.	Drawing paper, artists' boards, copper-plate printing paper.	Colored paper, also lacquered and white coated paper.		Parchment paper.	Lace paper and similar perforated paper.	Wall paper.	Printing paper, plain, ungummed.
		Plain.	With impressed designs, marbled, or goffered.				
United Kingdom	$11,679	$900	$24	$1,922	$8,127	$97	$5,499
Germany	41,000	5,279	389	34,308	802	4,793	80,735
Other markets:							
Australia	2,944	97	1,459	....	....	....	1,776
British India	267	1,776	1,167	....	....	....	40,075
Canada	....	....	....	....	....	802	924
Norway	....	....	....	....	24	....	340
Sweden	....	....	....	....	316	....	24
Denmark	1,313	....	....	....	218	....	1,070
Netherlands	....	....	....	....	....	121	6,618
Belgium	170	....	....	145	427	....	4,306
France	2,554	535	1,411	510	121	....	48
Switzerland	1,216	267	121	729	170	170	2,408
Spain	....	1,021	....	....	48	....	72
Portugal	....	194	....	....	24	....	....
Italy	389	535	72	948	340	535	4,063
Greece	486	12,677	....	267	....	....	63,091
Bulgaria	1,386	48	194	....	....	24	67,205
Serbia	145	389	48	413	1,362	170	62,826
Roumania	2,871	4,112	194	559	1,094	1,240	6,326
Russia	1,070	48	243	632	437	170	705
Turkey	5,742	12,285	924	364	....	291	103,524
Egypt	437	23,699	827	218	....	48	97,816
Dutch East Indies	....	121	....	....	....	....	1,070
China	....	74,602	....	....	....	....	32,459
Japan	....	17,445	....	....	....	....	24
Brazil	291	97	24	....	....	....	28,979
Argentina	243	170	340	....	121	2,481	9,587
Chile	....	....	....	....	....	....	389
Peru	....	....	....	....	....	....	48
Colombia	....	....	....	....	....	....	267
United States	291	1,727	48	....	1,046	1,703	1,727
Mexico	....	....	....	....	....	....	729
Total other markets	21,815	151,845	7,072	4,785	5,748	7,755	538,496
Total to all destinations	74,494	158,024	7,485	41,015	14,677	12,645	624,730

Country to which exported.	Cigarette papers in sheets.		Copying paper, tissue paper and paper for making artificial flowers, in sheets, plain.	Other paper not specially mentioned, plain.	Paper not specially mentioned, lined.	Other paper not specially mentioned, with impressed designs like crape, goffered or marbled.
	Plain.	Ribbed.				
United Kingdom	$632	$75,624	$33,189	$14,648	$632	$437
Germany	138,476	60,101	350,046	20,925	997	4,574
Other markets:						
Australia	....	....	1,338	6,740	....	....
British India	35,282	2,676	4,623	8,638	729	827
British South Africa	2,141	....	....	802	....	....
Norway	....	....	72	4,112	....	....
Sweden	....	1,289	583	170	....	....
Denmark	....	....	510	1,265	....	....
Netherlands	97	948	389	....	....	243
Belgium	6,106	53,531	1,265	18,346	....	....
France	170	....	5,693	1,800	....	....
Switzerland	....	....	13,991	13,261	97	....
Spain	121	....	....	170	....	....
Italy	64,918	3,284	9,051	5,839	24	1,678
Greece	20,463	2,798	389	36,401	802	121
Bulgaria	36,255	....	170	4,988	924	267
Serbia	10,316	....	510	8,808	....	2,068
Roumania	46,183	7,397	1,703	788	....	486
Russia	1,459	6,106	486	291	72	218
Turkey	158,550	52,606	11,582	32,994	16,059	2,360
Egypt	55,478	5,328	8,296	38,104	6,302	....
Dutch East Indies	20,974	....	....	48	5,864	....
China	827	729	48	851	121	....
Japan	....	....	....	535	....	....
Brazil	3,966	121	12,506	67,108	2,457	....
Argentina	1,265	997	6,034	3,455	24	....
Chile	194	....	9,246	....	145	....
Peru	....	....	....	48	267	....
Colombia	....	....	....	1,240	1,143	....
United States	12,482	2,530	4,550	754	316	340
Mexico	....	....	2,408	....	243	....
Cuba	....	....	....	1,532	....	....
Total other markets	477,247	140,340	95,443	259,088	35,589	8,608
Total to all destinations	616,355	276,065	478,678	294,661	37,218	13,619

(The tonnage of various papers exported by Austria-Hungary in 1913, according to the report of Consul General Denby, was as follows: Packing paper, uncolored, 19,995 tons; printing paper, not sized, 13,480; cigarette paper in sheets, 2,670; copying, silk, and artificial flower paper, 2,310; packing paper, colored or tarred, 5,825; wall paper, 69; blotting paper, uncolored, 99; blotting paper, fine, 21; drawing paper, 350; variegated colored paper, 1,623; parchment paper, 147; photographic paper, ½; sensitized paper, 63; other chemical paper, 64; lace and perforated paper, 66; and writing paper, 10,268 tons.)

IMPORT TRADE.

The imports of Austria-Hungary are chiefly of paper pulp from Sweden and of chemical, photographic, etc., paper from Germany. One hundred and twelve tons of printing paper for newspaper use were imported in 1913, worth $11,648, and about the same quantity in 1912, about two-thirds of which came from Germany and one-third from Italy.

The import of wall paper was for the larger part from Germany, but with considerable quantities from France and England. It came in two forms, viz, sheets, of which 351 tons worth $118,500, and rolls, of which 134 tons worth $40,000, were imported in 1913, which figures are slightly higher than those of 1912.

Esparto rush paper from England and so-called "Kraft" strong paper from Sweden have a large sale in Austria.

The import of sensitized paper exceeded $912,000 in 1913, of which two-thirds came from Germany, from which country also came over $200,000 worth of picture post cards and over $632,318 worth of children's picture books. The imports of paper consist very largely of articles made of paper and not of paper in the usual commercial sense, and in total exceeded $17,000,000 worth in 1913.

There would seem to be small chance of the import into Austria of American paper on a large scale. The sale of fancy grades of fine note paper might be pushed to advantage, but its only chance of success would lie in the presentation of superior quality of goods, tastefully presented to attract the purchaser's eye. In fact, the American product would have to rely for a market on the high-class trade where a fine article would command a sale at a higher price than the domestic goods.

CREDIT TERMS.

The usual terms of sale of paper wholesale are in Vienna: Delivery of the goods at the warehouse of maker at 2 per cent discount for cash, or on four months acceptance. In Bohemia the practice is stated by the consul at Prague to be cash within 30 days of the invoice with 3 per cent discount, or six months against bill of exchange.

As seen above, the import trade of Austria-Hungary is almost entirely supplied by Germany. The shipping facilities to and from these two countries afford every advantage, whether by rail or river. The German merchants study carefully the market and give long credit.

The departments of the Austrian Government confine their pur-ses to Austrian products.

CARLSBAD, BOHEMIA.

From Consul Charles L. Hoover.

Only the finest qualities of fashionable note paper, carbon paper, and blotting paper are imported, and even these classes must compete with similar articles produced in the country. The newspaper stock is all of domestic manufacture.

A limited quantity of fine English and German note paper reaches this market. The former comes from Vienna, where an English manufacturing firm has a sales agency. The latter is imported direct from Berlin, Blotting paper is drawn to a very large extent from Switzerland and Germany, and extra fine qualities of drawing and drafting paper also come from the latter country.

Of writing paper of all grades, including envelopes, around 260,000 pounds are used annually. The quality of typewriter paper used by the majority of the larger firms here is in the form of sheets 11¼ by 17¾ inches, folded so as to form two leaves 11¼ by $8\frac{7}{16}$ inches. This paper weighs 19.8414 pounds per 1,000 sheets, and costs, delivered, $0.0914 per pound. The sizes of the sheets put out by the different manufacturers vary a trifle from the measurements given above, but not sufficiently to cause any great difference in the size of the paper. Single-leaf sheets are also used by some of the commercial houses, the measurements being about the same as the single leaves of the doubled paper.

There is a great variety in the sizes of paper used for social correspondence, 21 different sizes having been found in one paper store; but the average size is about 6.88 by 8.85 inches for the common grades, the sheets being folded to form two leaves. The finer qualities are wider, in some cases as much as 2 inches per leaf, but the length from top to bottom does not vary so much. All envelopes are rendered opaque either by a lining of tissue paper or by coloring the paper forming the inside of the envelope.

Paper used for official correspondence, called "Kanzlei Papier," is generally 13.3858 by 16.5354 inches, folded to form two leaves 8 inches wide.

The classifications "bond," "ledger," and "linen," as applied to writing papers, has not been found in this market, the terms used being "minister paper," "typewriting paper," "office paper," "linen post," "bank post," "commercial post," and "document paper," for which the corresponding American equivalents are not known. Of these classes there are 579 different weights and qualities listed, and 21 different colors, shades, and tints are offered. The paper sold to the paper dealers by the manufacturers is usually in large sheets, which are cut up by the stationery packers and other users into sizes to meet their convenience, a variety of measurements being available to choose from, so that each purchaser may cut his particular paper without waste.

In addition to the "Kanzlei Papier" mentioned above, the sizes given by one of the largest Vienna firms selling to the trade here are as follows:

Centimeters.	Inches.	Centimeters.	Inches.
40 by 50	15.7480 by 19.6850	56 by 76	22.0472 by 29.9212
42 by 52	16.5354 by 20.4224	58 by 84	22.8346 by 33.0708
42 by 68	16.5354 by 26.7716	59 by 92	23.2183 by 36.1204
44 by 56	17.3228 by 22.0472	60 by 87	23.6220 by 34.2519
45 by 57	17.7165 by 22.4409	63 by 95	24.8031 by 37.3015
46 by 59	18.1102 by 23.2183	68 by 84	26.7716 by 33.0708
47 by 60	18.5039 by 23.6220	69 by 106	27.1953 by 41.7322
48 by 62	18.8976 by 24.4094	70 by 100	27.5590 by 39.3700
50 by 70	19.6850 by 27.5590	76 by 108	29.9212 by 42.5196
50 by 80	19.6850 by 31.4960	76 by 112	29.9212 by 44.0944
52 by 84	20.4724 by 33.0708	84 by 116	33.0808 by 45.6692
53 by 69	20.8661 by 27.1953	95 by 126	37.3015 by 53.5432
54 by 76	21.2598 by 29.9212		

Blotting papers are sold in sheets, measuring, as a rule, 17½ by 22½ inches, although other slightly larger sizes may be had. Three different grades of most marks are sold, namely, light, medium, and heavy. Of the "Hiru" brand bought in Vienna the light weighs 78.2633 pounds per 1,000 sheets and sells at warehouse in Vienna for $0.1348 per pound. The medium grade weighs 103.6162 pounds per 1,000 sheets and is sold for $0.1489 per pound. The heavy weighs 167.5496 pounds per 1,000 sheets and sells for $0.1478 per pound. One other quality weighing 44.092 pounds per 1,000 sheets and measuring 18.5039 by 23.622 inches is sold here. The price is $0.072 per pound, wholesale.

No book papers have been found on the market here. The only printing done is newspaper work and job printing, so that no demand for book paper exists.

The standard size of carbon is 12⅝ by 8 inches.

TOILET PAPER.

Toilet paper is sold in all the paper stores of Carlsbad, and the market for the same seems to have been very well canvassed. Bundles of 500 sheets, both plain cut and folded for containers, are sold in two grades, retailing at 24 and 30 hellers, or approximately at $0.049 and $0.06, respectively. It is manufactured in many of the small towns of Austria and sold by jobbers from Vienna, Prague, and other large centers. On some brands the labels are printed in English.

A large part of the paper is manufactured for the large Vienna houses. No direct importations from other countries are made direct to Carlsbad, and statistics can more easily be given from the large importing centers of Austria. Traveling salesmen place orders during the dull season, representing the firms in the cities mentioned above. It is probable that the cities of Austria could supply the entire demand in this line.

Hotels and restaurants, of which this city is mostly composed, supply paper free to patrons, the fixtures being of all varieties, including the folded paper in slot boxes. Roll paper is sold, but in viewing samples it is found to be less popular than the box variety. The ordinary square-cut paper seems to be most common. Many manufacturers of medicine, disinfectants, etc., supply paper to public houses with their advertising printed thereon at small cost to the proprietor.

PRAGUE, BOHEMIA.

From Consul Frank Deedmeyer.

There is at this time no paper of American manufacture sold here except small quantities of the finest and most costly correspondence paper and carbon paper. It is not believed that in view of the present cost of the raw materials and of labor American papers, other than the best letter paper, can compete successfully with the paper varieties of local manufacture.

The demand for finer papers, made partially of rags, is steadily increasing, as there is a greater consumption of writing, commercial, blank book, check, and note and bond papers. These finer papers come here mostly from other Austro-Hungarian Provinces. A small portion is imported from the United States through German commission houses, from Germany and from Great Britain.

No carbon paper is manufactured in this consular district. Inferior qualities are produced in other parts of Austria. The best comes into the local market through German commission houses importing from the United States.

Credit terms of sale: Cash within 30 days of invoice with discount at 3 per cent or 6 months against bills of exchange.

REICHENBERG, BOHEMIA.

From Consul William J. Pike.

Northern Bohemia ranks high in the production of all classes and kinds of paper. So great is the variety and superior grade of all classes that it can be safely said that very little foreign product reaches these markets.

The importance of this industry can be seen at a glance by the statement that the 40 larger mills produce 113 different varieties of paper, 14 of which have an annual production of 64,000,000 pounds. Not only is the home market generally supplied, but large exports go to England, North and South America, India, Japan, Orient, Asia, the Balkans, Italy, and Egypt.

The 40 concerns engaged in the manufacture of various kinds of paper employ approximately 8,000 people. The production seems to meet in every way the demands of the local market.

It would be impossible to state the amount of paper imported into the district, but, for the reasons before mentioned, it is of comparatively small consequence and the outlook for the sale of American product is not at all promising.

Of the kinds of foreign make that reach these markets only three are of importance, viz, from Germany, a colored paper used for the inside of book covers; from England, a featherweight paper made from esparto rush, or so-called alfa cellulose; from Sweden, kraft paper, which is used to some extent in the district but of which little is manufactured here.

TRIESTE, COASTLAND.

From Consul Ralph C. Busser.

The paper consumed in this district is chiefly manufactured in Austria-Hungary and Germany. News or printing paper, wrapping paper, blotting paper, book paper, the cheaper grades of writing paper, and boards of all kinds are chiefly of domestic manufacture.

From England is imported blotting paper, carbon paper, and the finer grades of linen letter paper. The real parchment and wax paper is imported from France and Italy, but a good imitation thereof is manufactured in Austria. The imported wall paper of the cheaper grades comes from Germany and the higher grades from France and Belgium. The import trade in paper, however, is almost monopolized by the German manufacturers, who have built up a very large trade here in the high and medium grades of writing paper, drawing paper, carbon paper, blotting paper, tissue and fancy papers.

According to the opinion of a prominent local dealer, there is opportunity for the sale of American fine linen and bond letter paper, carbon and copy-book paper, blotting paper, toilet paper, and wall paper, all of the higher grades, and especially of novelties in the paper line, as the latter make an attractive appearance in the show windows and advertise the merchant's business.

Among large users of paper in this district are the playing-card and cigarette-paper factories in Trieste. They do not manufacture the paper out of which their goods are made or prepared for the market, but obtain the same from domestic and foreign sources of supply.

Letter paper of the higher grades is chiefly imported from England and Germany, and the retail prices of same average considerably higher than in the United States. The import duty alone will not account for this difference in price. A more influential factor is the fact that fine letter paper is considered a luxury in Austria, and that those who want it can afford to pay almost any price that may be demanded. In other words, because the sale of fine letter paper is confined chiefly to those who buy so-called luxury goods, the retailers demand a higher percentage of profit on them than on goods not considered as in the luxury class.

IMPORT TRADE.

The imports of paper, in quintals (1 quintal = 100 kilos = 220.46 pounds) of all kinds into Trieste by sea in 1913 were as follows: From Belgium, 182; France, 83; United Kingdom, 110; Greece, 76; Italy, 10,119; Netherlands, 156; other countries, 154.

Of course the above statistics do not include the large quantities of paper imported into the district by railway, principally from Germany. In 1912, for instance, there was imported into Trieste alone from Germany by rail 14,731 quintals of paper, 1,785 quintals of cardboard, and 4,901 quintals of paper goods. The Trieste imports direct from the United States in 1912 were as follows: Paper of various kinds, 774 quintals; paper goods, 155 quintals. Trieste imported from Italy, in 1912, 11,741 quintals of paper. Thus, Germany ranks first and Italy second in paper imported here. The paper imported from Italy is chiefly paper for making playing cards, packing paper, and blotting paper. The kinds of paper chiefly imported into Austria are wall paper from Germany, France, Belgium, and Great Britain; drawing paper and parchment from Germany and Belgium; lithographic paper from Germany; cigarette, tissue, and flower paper from Germany and France; pressed and perforated paper from Germany; gilt and silvered paper from Germany;

cigarette paper in books from France; colored paper from Germany; paper toys from Germany; fancy paper ware, fine boxes, and labels from Germany, France, Great Britain, and Italy; packing paper and blotting paper from Germany and Italy; slate and polishing paper, glazed board, and tar, stone, and common pasteboard chiefly from Germany.

MARKET SUGGESTIONS.

The most favorable market for American goods is probably in such lines as fine writing paper, especially bond and linen paper, wall paper, silk copy paper (Seidenpapier) for letter books, carbon paper, toilet paper, and fancy paper goods. Only high-grade paper should be offered, as the low and medium grades are principally supplied by the domestic manufacturers. In competing with European manufacturers American firms will continue to remain at a great disadvantage until they establish in Austria depots fully stocked with paper for the prompt execution of orders. Local importers say that it takes at least 40 days to have an order delivered by an American house; and that in high-grade papers, which are generally season goods, the merchants prefer to lay in their stocks of newest styles as soon as possible, as otherwise they may lose business to competitors who have had earlier deliveries of novelties for the season trade.

"Visiting the trade" is another important factor in building up and maintaining profitable business relations with the wholesale paper dealers in this district. This is especially important to American manufacturers of specialties and novelties in the paper line, the sale of which can only be thoroughly promoted through salesmen with samples calling regularly on the merchants. Expert salesmanship as well as catering to special needs have played an important part in the vast and still growing business which German paper manufacturers have established in this region. Still another factor which has greatly contributed to the extension of German trade in Austria, is the tendency of German paper factories to specialize in production, so that the capital, technique, and energy of the manufacturers may be concentrated upon one line of goods.

The results of this specialization are the installation of the most modern and efficient machinery, cheaper raw materials, more economical processes, technical and operating improvements, better organization of the business, large-scale production, and the development of originality, inventiveness, and artistic ability. This industrial specialization has enabled the Germans practically to monopolize certain special lines of Austrian trade, and low prices, attractive samples, and good salesmanship have enabled them to compete even with Austrian manufacturers in many other lines. They have succeeded in spite of high import duties and heavy freight charges from factory to dealer. The Austrian industry has not yet reached such a high state of specialization, many of the domestic firms manufacturing too many different lines.

The usual terms upon which local dealers make purchases of paper are 3 per cent discount for cash in 30 days, but long-established, reputable firms can obtain four months credit.

BUDAPEST, HUNGARY.

From Consul General William Coffin.

The paper industry and the paper market in Hungary are effectually controlled at the present time by the Austro-Hungarian paper cartel or trust. As will be seen by statistics quoted in this report the importation of paper into Hungary, with the exception of its purchases in Austria, is relatively small. The pulp and paper mills in Hungary, of which there are some 35 worth mentioning, produce now about $8,000,000 worth of material per annum. There is an importation of nearly $5,000,000 of manufactured paper, and nearly $1,000,000 of paper stock, consisting principally of pulp in sheets and chemical wood pulp. Of this importation, both with respect to paper stock and manufactured paper, about 95 per cent comes in, duty free, from Austria. The pulp industry in Hungary is important, and there is a considerable export of this material, chiefly to Austria. Chemical wood pulp forms the largest part of the export and goes to nearly all the countries of Europe.

The following table will give an idea of the fluctuations of the export and import trade, as they cover the years 1908, 1910, and 1912, and show the quantities of material for paper making and paper imported and exported in those years:

Articles.	Imports.			Exports.		
	1908	1910	1912	1908	1910	1912
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Mechanical wood pulp	2,496,710	3,088,424	1,543,220	176,368	176,368	247,356
Straw and similar paper stock	....	....	22,707	6,032,227	5,059,116	5,410,750
Cellulose or chemical wood pulp	7,839,337	6,499,240	8,694,722	86,713,752	80,927,118	99,412,689
Paper in sheets, all kinds	28,079,329	35,131,844	42,048,115	4,817,933	7,600,138	5,733,944
Wrapping paper	33,509,920	37,985,699	38,596,153	14,048,152	21,377,786	26,447,263
Newspaper	42,804,734	51,491,079	65,105,145	1,410,944	2,878,767	1,930,648
Fine printing and writing paper	18,955,592	26,404,615	29,331,752	2,126,998	2,282,863	2,924,181
Paper bags	1,499,128	1,352,743	1,732,595	733,470	982,370	1,128,755
Stationery in boxes, finest grades	2,267,872	2,671,755	2,939,393	218,917	246,474	202,382
Stationery in boxes, cheaper grades	2,112,448	2,839,744	2,922,638	182,320	127,546	165,565
Cigarette paper	1,700,188	1,758,169	1,880,083	243,608	793,436	1,073,199

The first paper made from straw was manufactured in Hungary in 1760, or four years later than its manufacture began in Germany. Prior to this date the only paper manufactured in Hungary was made from flax and hemp, and the industry may be said to have begun only in 1760. About this time esparto grass, imported from Spain and North Africa, began to be used in the place of ordinary straw, for at this time the process of whitening was not known and paper made of straw was not satisfactory for all purposes on account of its yellow color. Gottfried Keller, a German, discovered a process in 1845 by which cellulose could be manufactured from the wood of certain trees. A few years subsequent to this the manufacture of cellulose in Hungary began and has since developed into one of the important industries of the country. Manila, hemp, jute, *sorghum saccharatum*, cane, bamboo, potato peelings, and many other materials have been used in Hungary from time to time in the manufacture of paper. Supplementary materials like kaolin, talcum, china clay, plaster of Paris, rubber, glue, etc., are used more or less.

In Hungary the test which is principally employed in determining the value of paper is one which establishes the amount of lignin which it contains. There are several methods used in Hungary to determine the amount of lignin in any given paper, but the ones in use to the greatest extent are the phloroglucin and the aniline sulphite solutions. In the Royal Hungarian Technicological Industrial Museum at Budapest there is a department devoted to the inspection and analysis of paper and paper materials under the direction of Prof. Alexander Rejto.

PRODUCTION OF HUNGARIAN MILLS.

The paper industry in Hungary has been growing appreciably of late years. In 1904 the paid-in capital stock of the mills was $2,588,250, with factory equipment and real estate valued at $2,346,680. In 1912 the capital invested had increased to $5,595,289, with real estate valued at $3,729,719 and factory equipment at $5,894,105. The largest company in Hungary is called "Az Elsó Magyar Ipar Reszvénytarsaság" (The First Hungarian Paper Manufacturing Co., Ltd.). It operates several mills and holds a controlling interest in the stock of several smaller concerns. Its paid-in capital is about $800,000.

In 1913, due chiefly to the effects of the Balkan wars, this company paid no dividend. Its statement shows net earnings for 1913 of $39,670, of which $26,390 was applied to the reserve fund and the remainder carried over as a cash balance. This showing is largely due to the company having taken up an issue of stock of the Smith & Meynier mills, amounting to about $63,000, and issued to cover a heavy deficit in 1912, caused by the unfavorable business conditions resulting from the war.

The market which can be created for American paper in Hungary will depend entirely on the price at which it can be delivered here. One condition, however, has been noted in the canvass of the trade here. Hungarian newspapers and wholesale paper merchants would be very glad to purchase supplies outside of the Austro-Hungarian paper trust. They have invariably stated that if American white paper for newspapers can be sold here at equal prices with the Austrian product, they would be only too glad to send their orders to America. This item (news paper) is the most important feature of the paper trade. Attention is called to statistics below. There ought to be a market in Hungary for the sale of the finer qualities of stationery for social correspondence, although this consumption is comparatively small. American paper exporters will find Hungarian merchants disposed to give their offers attentive and friendly consideration. If they can land paper in Hungary at competitive prices for the same qualities, there is no question but that they will be able to make a considerable market.

Due to the system of forestation which exists in Hungary, there are at present large tracts of land containing trees suitable for wood pulp, and there is little prospect that under this system the sources of supply for wood pulp will not continue to be sufficient for the demand. The pulp mills not only supply the Hungarian factories but export a considerable quantity of chemical wood pulp. A part of this chemical wood pulp is sent to the United States, the declared value of the shipments for 1912 and 1913 being, respectively, $43,697 and $33,451. Straw is to be had at all places in Hungary. Esparto grass is imported from North Africa. All the rags available in Hungary are used in the manufacture of the finer grades of paper, the exportation of rags being, in the interest of the Hungarian paper industry, forbidden by law. There is a definite import of rags into Hungary. Kaolin, which is used by the factories to eliminate the wood in the manufacture of chemical wood pulp, is found in nearly all parts of Hungary, and the mills which require this clay are usually located in a district in which there is an abundant supply. The hulls of rice from the rice mills of Hungary are used in the manufacture of cigarette papers.

The prices, per ton, of the principal raw materials are as follows:

Mechanical wood pulp, $31.29 to $33.10; cellulose, chemical wood pulp, $40.54 to $42.36; rags, $110.48; esparto grass, $55.24; rice hulls, $55.24 to $62.58.

The wholesale prices of some of the principal papers are as follows:

Kinds.	Price per pound.	Kinds.	Price per pound.
Newspaper, roll printing paper	$0.0249	Writing paper and envelopes, better grade, domestic manufacture	$0.186
Newspaper, roll printing paper, "satiniert"	$0.0267- .0276	Writing paper and envelopes, imported, fine qualities, in fancy boxes	$0.55 - 1.38
Kanzlei paper, containing wood stuff	.0331	Printing paper, fine quality, for illustrations	.072 - .09
Kanzlei paper, free from wood stuff	.0461	Blotting paper, domestic	.072 - .09
Linen paper	.0733	Blotting paper, imported	.136 - .277
Wrapping paper	.0258- .0313	Bristol board, white	.136 - .186
Parchment paper	.0733- .129	Cardboard, white and colored, domestic	.063 - .09
Box board, press board, bristol board, pasteboard, etc	.0138- .0175	Cardboard, white and colored, imported	.109 - .277
Drawing paper	.136		
Writing paper and envelopes, cheap grade	.09 - .10		

SCALE OF WAGES.

In the Hungarian pulp and paper mills both men and women are employed—men for machine work and women for sorting and counting. Ordinary workmen receive 3 crowns ($0.61) a day, while women receive 2 crowns ($0.41) per day. The skilled workmen receive from 5 to 6 crowns ($1.02 to $1.22) per day.

Ninety per cent of all machinery in use in the Hungarian mills is of German manufacture.

EXPORT TRADE.

The following table gives the statistics of export of paper stock and paper, by classes and countries, for the year 1912:

Articles and countries.	Pounds.	Value in U. S. gold.
PAPER STOCK.		
Mechanical wood pulp:		
Austria	100,760	$1,186
Roumania	198,000	2,329
Total	298,760	3,515
Chemical wood pulp, cellulose:		
Austria	48,755,520	800,787
Germany	8,202,260	126,393
Switzerland	22,000	339
Italy	11,965,800	184,388
France	2,571,140	39,620
Spain	66,000	1,017
Belgium	154,440	2,380
Great Britain	17,537,080	270,238
Roumania	264,000	4,068
Straits Settlements	3,993,000	61,530
Japan	2,484,020	38,278
United States	3,626,700	55,886
Brazil	55,220	851
Uruguay	66,660	1,027
Total	99,763,840	1,586,802
Straw, esparto, etc.:		
Austria	5,148,000	135,381
Russia	198,440	5,219
Roumania	53,020	1,394
Total	5,399,460	141,994
Pulp and other materials, in sheets:		
Austria	4,292,200	73,553
Bosnia-Herzegovina	579,700	8,129
Switzerland	220	16
Italy	220	3
Russia	32,560	2,327
Roumania	288,640	4,881
Serbia	365,420	5,109
Bulgaria	75,680	1,294
Montenegro	440	7
European Turkey	320,320	4,456
Egypt	220	14
Total	5,955,620	99,789
Summary.		
Austria	58,296,480	1,010,907
All other	53,121,200	821,193
Total	111,417,680	1,832,100
PAPER.		
Wrapping paper, heavier than 30 grams per square meter, white and colored:		
Austria	21,942,580	637,781
Bosnia-Herzegovina	517,440	14,085
Germany	23,320	678
Italy	220	6
Great Britain	495,660	14,407
Roumania	55,660	1,592
Serbia	264,440	7,564
Bulgaria	425,700	12,177
Montenegro	1,320	38
Greece	40,040	1,145
British Mediterranean possessions	4,400	126
PAPER—continued.		
Wrapping paper, etc.—Continued.		
European Turkey	457,820	$15,208
Asiatic Turkey	489,060	13,989
Straits Settlements	64,240	1,837
China	511,280	14,625
Japan	21,560	617
Egypt	511,060	14,619
Morocco	319,660	9,144
British African possessions	440	13
United States	660	19
Brazil	21,340	610
Australia	7,260	208
Total	26,175,160	760,488
Blotting paper:		
Austria	6,380	365
Bosnia-Herzegovina	880	50
Roumania	3,740	276
Serbia	440	32
Bulgaria	9,460	698
Greece	440	32
European Turkey	1,540	114
Egypt	440	33
Total	23,320	1,600
Drawing paper, copper-engraving paper, and colored paper sheets:		
Austria	4,400	430
Bosnia-Herzegovina	220	22
Bulgaria	16,720	1,635
Greece	220	22
European Turkey	1,100	107
Asiatic Turkey	220	22
Egypt	2,200	215
Total	25,080	2,453
Tracing paper:		
Austria	38,720	2,573
Germany	6,160	568
Switzerland	5,060	467
Italy	220	20
Roumania	11,660	1,076
Serbia	10,340	954
European Turkey	660	61
Total	72,820	5,719
Colored paper with designs (figured paper), card paper, packing paper with colored figures, and transfer picture paper:		
Austria	3,300	244
Bosnia-Herzegovina	880	65
Bulgaria	220	16
Total	4,400	325
Other colored paper with figures, packing paper with colored figures, and pressed drawing paper:		
Total, 1910	440	41
Total, 1909	440	41
Total, 1908	1,540	142

Articles and countries.	Pounds.	Value in U. S. gold.
PAPER—continued.		
Parchment paper and parchment packing paper.		
Austria	8,360	$694
Bosnia-Herzegovina	880	73
Russia	440	37
Roumania	2,200	183
Bulgaria	440	37
European Turkey	440	37
Total	12,760	1,061
Paper for photographing purposes, sensitive to light:[1]		
Austria	5,500	5,075
Bosnia-Herzegovina	660	609
Switzerland	1.320	1,218
Italy	440	406
Russia	440	406
Roumania	880	812
Bulgaria	220	203
Total	9,460	8,729
Other chemically prepared paper, reacting indigo blueing, straining paper, and fly and insect paper:		
Austria	20,240	2,801
Bosnia-Herzegovina	660	140
Germany	16,280	3,455
Switzerland	440	93
Italy	3,740	518
France	4,400	609
Netherlands	1,100	233
Great Britain	3,520	747
Russia	1,980	420
Roumania	6,380	883
Serbia	2,640	560
Bulgaria	2,860	462
European Turkey	880	142
Asiatic Turkey	220	47
Straits Settlements	440	71
Australia	880	142
Total	66,660	11,323
Gold, silver, and lace paper:		
Austria	1,540	156
Bosnia-Herzegovina	1,540	156
Roumania	1,100	112
Serbia	1,540	156
European Turkey	220	22
Total	5,940	602
Wall paper:		
Austria	1,100	152
Germany	440	61
Total	1,540	213
Newspaper, roll printing paper, rough and glazed:		
Austria	971,080	26,881
Bosnia-Herzegovina	221,540	6,541
Roumania	3,080	88
Serbia	106,920	3,058
Bulgaria	369,820	10,579
Montenegro	27,720	793
British Mediterranean possessions	15,400	441
European Turkey	53,900	1,492
Asiatic Turkey	20,020	573
PAPER—continued.		
Newspaper, etc.—Contd.		
China	146,740	$4,062
Brazil	4,400	122
Total	1,940,620	54,630
Printing paper (fine quality, glazed), writing paper, and paper for music printing:		
Austria	884,400	43,251
Bosnia-Herzegovina	281,820	13,782
Germany	1,320	65
Italy	220	11
Great Britain	33,660	2,112
Roumania	41,140	2,012
Serbia	53,020	2,593
Bulgaria	669,680	32,750
Montenegro	80,080	3,916
Greece	48,180	2,356
European Turkey	95,040	4,648
Asiatic Turkey	306,240	14,977
Straits Settlements	115,940	5,670
Dutch East Indies	4,620	226
China	1,540	75
Egypt	84,480	4,131
Tripoli	3,520	172
Morocco	1,760	86
Brazil	224,180	18,617
Total	2,930,840	151,450
Cigarette papers:		
Austria	38,280	6,358
Germany	82,720	13,739
Belgium	3,520	585
Netherlands	880	146
Denmark	440	73
Roumania	53,240	8,843
Bulgaria	11,220	1,864
Greece	193,820	32,192
British Mediterranean possessions	6,380	1,060
European Turkey	13,200	2,192
Asiatic Turkey	3,740	621
China	1,320	219
Egypt	22,660	3,764
Argentina	440	73
Total	431,860	71,729
Wrapping paper not more than 30 grams per square meter, silk paper, and pressed drawing paper:		
Austria	198,000	13,520
Bosnia-Herzegovina	37,620	2,569
Germany	7,040	481
France	220	15
Roumania	16,060	1,097
Bulgaria	660	45
Greece	1,540	105
European Turkey	660	45
Total	261,800	17,877
Paper and paper sheets, linen lined: Austria	1,540	185
Summary.		
Austria	24,125,420	740,466
All other	7,856,257	347,918
Total	31,981,677	1,088,385

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[1] There were no exports in 1912 of this class of paper "not sensitive to light."

It will be noted from the foregoing table that the export of paper stock is valued at more than the exports of paper. The principal item is chemical wood pulp, which, exclusive of Austria's purchases, goes in considerable quantities to Germany, Italy, and Great Britain, and in smaller quantities to the Straits Settlements and Japan.

The exports of paper show a steady growth from $675,106 in 1908 to $1,089,365 in 1912. The Austrian market is the most important. Deducting exports to Austria, Hungary exported paper to the value of $348,899 in 1912, of which $222,532 went to Bosnia-Herzegovina, the Balkan States, and Turkey. Bulgaria and Turkey were her best customers, purchasing, respectively, $60,466 and $51,484.

Import statistics show that about 95 per cent of Hungary's import of paper and paper stock comes from Austria and a very large percentage of it is of Austrian manufacture. There is no doubt a certain amount of transit trade, but its volume is not important.

Germany sells more paper in Hungary than any country other than Austria. In 1912 her exports to Hungary were valued at $249,951. Outside of Germany and Austria imports of paper were valued at $26,184. Hungarian statistics credit the United States with $2,442 of this amount.

The largest item in the imports from Germany is sensitized photographic paper. Wall paper is her next most important line, followed by wrapping paper in various weights, including colored wrapping paper printed in designs and used in retail stores for wrapping up small parcels.

The largest item of Hungarian imports is white paper for newspaper printing, which was valued at $1,698,157 in 1912 and practically all of which came from Austria, Germany supplying a quantity valued at $659. The import of next largest value is fine quality paper for commercial stationery and other printing. The import of social stationery is included in this item. Its value in 1912 was $1,455,981, of which $1,441,017 was supplied by Austria. Germany supplied $13,063 of the total, and very insignificant imports came from England, France, Italy, and Switzerland. Another important import is wrapping paper, white and colored, weighing more than 30 grams per square meter (1.05 ounces per 1.19 square yard). This item was valued at $1,012,063 in 1912, of which Austria supplied $989,511. Other considerable importations to which attention may be called are colored paper sheets, parchment paper, sensitized photographic paper, and wall paper.

The chief influence in Hungarian importation of paper is the question of price, so far as the large items are concerned. Concerning the special features of the trade, Hungarian dealers go outside of the Austro-Hungarian market for novelties or for certain staples which are not manufactured in their country, such as the finer qualities of social stationery. As the statistics indicate, direct trade with any countries other than Austria and Germany is almost negligible. Wholesale dealers state that they order from France, England, and other European sources of supply only in very limited quantities and usually to fill orders in hand. Stocks of foreign paper are not carried.

CREDIT TERMS AND IMPORT DUTIES.

Terms of sale from factories to distributors in Austria and Hungary are six months' credit, with 3 per cent discount for cash in 30 days. Some factories in Germany also give as long a credit as this, while purchases in France or England and from certain sources in Germany give from three to four months' credit. Dealers state that as a rule they prefer to pay for foreign papers within 30 days and take the 3 per cent discount. Prices of papers are usually quoted by weight.

The import duties on paper materials into Hungary are, according to the report of Mr. Coffin, as follows: Rags, duty free; mechanical wood pulp, chemical wood pulp, and cellulose, $0.0014 per pound; straw, esparto, etc., duty free; pulp and other materials of various kinds in sheets, $0.0016 to $0.0028 per pound; wrapping paper, heavier than 30 grams per square meter, white and colored, $0.0033 to $0.0037 per pound; blotting paper, $0.0066 to $0.0331 per pound; drawing paper, copper engraving paper, and colored paper sheets $0.011 to $0.0166 per pound; tracing paper, $0.011 per pound; colored paper with designs, card paper, packing paper with colored designs, and transfer picture paper, $0.0156 per pound; other colored paper with designs, packing paper with colored designs, and pressed drawing paper, $0.0221 to $0.0249 per pound; parchment paper and parchment packing paper, $0.0138 per pound; paper for photographing purposes, not sensitive to light, $0.0276 per pound; paper for photographing purposes, sensitive to light, $0.046 per pound; other chemically prepared paper, reacting indigo bluing, filter paper, and fly and insect paper, $0.0276 per pound; gold, silver, and lace paper, $0.0276 per pound; wall paper, $0.0506 to $0.0552 per pound; newspaper, roll printing paper, rough and glazed, $0.0083 per pound; other printing paper, fine quality, glazed, writing paper, and paper for music printing, $0.0083 to $0.0221 per pound; cigarette papers, $0.0083 to $0.0221 per pound; wrapping paper of a weight of not more than 30 grams per square meter, silk paper, and pressed drawing paper, $0.0083 to $0.0221 per pound; paper and paper sheets, linen lined, $0.0276 per pound.

FIUME, HUNGARY.

From Consul Samuel H. Shank.

There are two paper factories located in the Fiume consular district, the Zagrebacka Dionicka Tvornica Papira, at Agran, Croatia, and Smith & Meynier, at Fiume, Hungary. The former manufactures writing, drawing, and printing paper, and its sales are confined to the limits of Austria-Hungary. It produces about 2,000 tons of 2,204.6 pounds each year.

The firm of Smith & Meynier have a factory in the city of Fiume which manufactures cigarette, copy, cotton paper for collars, paper for artificial flowers, and Bible papers.

Since 1911 the importation of paper has decreased. The duty ranges from about 10 to 30 per cent of the value and only the finer grades can be imported. The total importations at the port of Fiume for 1913 were 10,314 tons. Of these, 9,430 tons were from Austria. The imports from Austria are, of course, free of duty. There has been no important change in recent years as regards the source of importations. Germany furnishes the greater part of the paper imported, but a small amount comes from England. None has been received from the United States.

The prospect of securing a market for American paper in this district would not seem very good, as the tendency is to rely more and more on the domestic supply. The tobacco industry being a Government monopoly, all cigarette paper must of necessity be purchased from domestic mills. As stated, the duty is from 10 to 30 per cent, and this is probably prohibitive, except for finer grades of paper. Shipping facilities are the best, a direct line running between this port and New York.

BELGIUM.

BRUSSELS.

From Consul General Ethelbert Watts.

Brussels is the center of the paper trade in Belgium. In this country there are 42 paper mills, 35 of them in the Brussels consular district. Paper of all classes is extensively made, supplying about two-thirds of all used in the country.

The principal sources of foreign supply are England, Germany, Austria, France, Sweden, and Norway. In 1900 to 1901, on account of low prices existing in the United States, paper of various kinds was exported from the United States into Belgium, but shortly thereafter prices advanced again and these shipments discontinued. At the present time very little paper is imported from the United States, but it is well liked and considered more solid than most foreign papers. Any future trade will depend entirely, however, upon the ability of American manufacturers to compete in price with other close competitors here.

Paper in Belgium is generally made from wood pulp. Of the 132,357 tons imported, only 2,398 tons came from the United States in 1913 (1 ton = 2,204.6 pounds).

It is impossible to ascertain the amount of each kind of paper used in the country. One of the largest paper importers in this city estimated that about 1,000,000 francs' ($193,000) value of writing and art paper was imported from England annually. Belgian paper manufacturers are generally unwilling to give much information about their trade.

The standard size of official writing paper is 44 by 56 centimeters (17.3 by 22 inches). Cream-colored paper is not in demand, a light shade of rose or blue tint being preferred. High and medium grades are mostly used. In this, and in book, Bible, and India papers, which are now supplied mostly from England, American manufacturers might have the best chance to compete. The papers must be very opaque to suit this market.

MARKET REQUIREMENTS.

There is no demand in Belgium for American bond and ledger papers. French vellum is generally preferred for business books used here. News paper must be in the roll, 80 to 90 centimeters (31½ to

35½ inches) wide. Weight should be 48 grams (1.7 ounces) to 52 grams (1.8 ounces). Two of the daily newspapers of Brussels are now importing their paper from Germany, paying for it 22.50 francs ($4.34) per 100 kilos (220 pounds) c. i. f. Antwerp. Recently Belgian customs duty on news paper has been reduced to 2 francs ($0.385) per 100 kilos (220 pounds).

Wrapping, fiber, manila, bogus, wall paper, etc., are manufactured in this country, and also imported from Germany, Sweden, and Norway at very low prices. It is considered that American manufacturers would have very little chance for competition in these classes in Belgium.

Parchment and wax papers are also made in this country, the former being exported to some extent to the United States.

Carbon papers of the cheaper grades are imported from Germany, England, and Austria, but a considerable quantity of the superior grades is imported from the United States.

Strawboard and Bristol board are used in large quantities here, the former coming mostly from Holland and selling at 17 francs ($3.28) to 18 francs ($3.47) per 100 kilos (220 pounds), the transportation by canal being short and very cheap. Bristol board might be imported with success from the United States.

No raw materials of domestic origin are available for the Belgian paper manufacturers except rags, waste paper, and straw. All other raw materials are imported from Norway, Sweden, and Canada. The price of the chemical pulp (pate chimique) imported from Norway and Sweden for the manufacture of paper is 20 francs ($3.86) to 25 francs ($4.825) per 100 kilos (220 pounds). The wood pulp (pate mecanique) which comes from Canada costs 11 francs ($2.12), 13 francs ($2.51), or 14 francs ($2.76) per 100 kilos (220 pounds).

There are no statistics available which give the total production of paper in Belgium. The output of the largest and far the most important paper mill, "Papeteries Godin," in the country is 80 tons per day. This paper mill has 11 machines, or a fourth of the entire number of machines in use in all the paper mills of Belgium, so that its production of 80 tons per day approximates very closely one-fourth of the entire production of Belgium.

Four of the paper mills make vegetable parchment paper, a small quantity of which is exported to the United States. There are three pulp mills in Belgium, none of which are important. The cost of labor in the mills is very cheap, ranging from 2 francs (39 cents) to 10 francs ($1.93) per day, and it is fairly efficient. The source of equipment for the mills is principally Belgian, German, and English; some American machines are also used.

The nearness of England, Holland, and Germany and the consequent low cost of transportation favor the exportation of paper to Belgium from these countries. American exporters must understand that the French language is used and that prices must be made in francs per 100 kilos (220 pounds) c. i. f. Antwerp. The payment is made in 30 days after delivery. Certain firms accept 30 days' sight drafts against bill of lading, but it is better to give the usual terms, 30 days from the first of the month after the delivery. German exporters sometimes give 90 days in order to get the trade, but in general the reliable importing firms pay 30 days from the first of the month after the delivery; that is, goods delivered during one month are paid for at the end of the next month.

The following table shows the extent of the Belgian import and export trade in paper of all classes for the year 1912:

	Imports.		Exports.	
	Pounds.	Value.	Pounds.	Value.
Wall paper	4,593,347	$361,907	4,232,233	$333,452
Cardboard paper	12,111,430	254,468	2,841,004	37,349
Typographical products; books unbound or sewed	2,901,282	1,234,485	1,670,680	731,283
All other paper	48,245,897	2,322,990	135,090,332	7,095,753
Total	67,851,956	4,173,850	143,834,249	8,197,837

In the above import figures the United States furnished no wall paper, no separate total of cardboard paper, 47,230 pounds of paper for typographical products and books unbound or sewed, and 160,871 pounds of all other paper.

In the export figures Belgium shipped to the United States 105,696 pounds of wall paper, no separate total of cardboard paper, 81,101 pounds of paper for typographical products and books unbound or sewed, and 4,806,466 pounds of all other paper.

IMPORTS AND EXPORTS.

The following table shows the Belgian imports and exports of paper of all classes, by countries, for the year 1912, the last statistics published:

Articles and countries.	Imports.		Exports.	
	Pounds.	Value.	Pounds.	Value.
WALL PAPER.				
Argentina	....	....	204,426	$16,106
Australia	....	....	39,461	3,109
Brazil	....	....	22,833	1,799
British India	....	....	209,801	16,553
Chile	....	....	275,371	21,696
France	714,220	$56,273	1,263,317	99,535
Germany	3,326,969	262,130	136,146	10,727
Japan	....	....	28,484	2,244
Chosen (Korea)	....	....	85,592	6,744
Mexico	....	....	51,037	4,021
Netherlands	60,722	4,784	964,668	76,005
Norway	15,161	1,194	....	....
Peru	....	....	85,500	6,736
Spain	....	....	81,672	6,435
Sweden	15,582	1,228	....	....
Switzerland	....	....	54,258	4,275
Turkey	....	....	42,516	3,350
United Kingdom	447,000	35,219	156,067	12,296
United States	....	....	105,696	8,328
Other countries	13,693	1,079	425,388	33,516
Total	4,593,347	361,907	4,232,233	333,475

Articles and countries.	Imports.		Exports.	
	Pounds.	Value.	Pounds.	Value.
CARDBOARD PAPER.				
Argentina			19,843	$283
Australia			59,526	800
Brazil			142,787	1,875
British India			152,617	2,004
China			187	3
France	629,715	$13,231	143,003	1,878
Germany	4,441,904	93,327	2,568	34
Japan			23,523	309
Netherlands	901,252	18,936	279,445	3,670
Norway	689,295	14,482		
Russia	1,851,307	38,897		
Sweden	2,167,056	45,531		
Turkey			179,236	2,354
United Kingdom	1,424,629	29,932	1,545,167	20,290
Other countries	6,272	132	293,102	3,849
Total	12,111,430	254,468	2,841,004	37,349
PAPER FOR TYPOGRAPHICAL PRODUCTS; BOOKS UNBOUND OR SEWED.				
Argentina			974	427
Australia			5,675	2,484
Austria	3,942	1,725	11,321	4,955
Canada			9,894	4,331
Chile			1,012	443
France	1,790,230	748,159	1,321,638	578,503
Germany	460,556	201,593	65,881	28,837
Italy	21,680	9,490	18,210	7,971
Netherlands	467,060	204,440	36,506	15,979
Peru			4,969	2,175
Roumania			5,685	2,467
Russia			6,914	3,026
Spain			9,169	4,013
Switzerland	19,656	8,604	38,398	16,807
Turkey			5,609	2,455
United Kingdom	78,496	34,359	16,391	7,174
United States	47,230	20,673	81,101	35,499
Other countries	12,432	5,442	31,383	13,737
Total	2,901,282	1,234,485	1,670,680	731,283
ALL OTHER PAPER.				
Argentina			1,849,683	97,156
Australia			5,451,618	286,354
Austria	512,652	24,684	255,383	13,414
Brazil			6,630,847	348,290
British India			3,552,420	186,596
Canada			2,877,986	151,170
Ceylon			160,527	8,432
Chile			2,407,231	126,443
China			1,830,004	96,123
Colombia			297,362	15,619
Cuba			1,134,164	59,573
Denmark			653,194	34,310
Dutch East Indies			1,299,153	68,239
Egypt			2,099,865	110,298
France	1,686,038	81,181	1,959,398	102,919
Germany	35,730,180	1,720,368	2,959,754	155,465
Greece			1,432,482	75,242
Italy	52,558	2,531	528,792	29,775
Japan			20,145,897	1,058,183
Morocco			224,810	11,808
Mexico			300,669	15,793
Netherlands	3,158,968	152,102	10,998,417	577,702
New Zealand			202,788	10,662
Norway	647,824	31,192	256,550	29,233
Panama			202,586	10,851
Peru			288,532	15,156
Philippines			193,301	10,153
Portugal			48,116	2,527
Russia	133,768	6,441	324,395	17,039
South Africa			1,428,022	75,008
Spain			712,763	37,438
Sweden	1,184,425	57,029	264,590	13,898
Switzerland	54,417	2,620	466,668	24,512
Tunis			335,070	17,600
Turkey			7,125,489	374,272
United Kingdom	4,877,797	234,862	46,993,322	2,468,375
United States	160,871	7,746	4,806,466	252,467
Uruguay			768,772	40,380
Other countries	46,399	2,234	1,623,236	67,278
Total	48,245,897	2,322,990	135,090,322	7,095,753

ANTWERP.

From Consul General Henry W. Diederich.

With reference to the consular district of Antwerp, the market is supplied by six large paper mills, furnishing all sorts and qualities. With this in view and the fact that Belgium imported from Germany, England, France, Austria, Holland, Sweden, and Russia 23,750 tons out of a total importation of, roughly, 25,900 tons, and of the latter total the United States only sent to Belgium 52 tons, it will be seen at once the nature of the competition in any attempt to do business on a profitable scale.

Neither the Belgian official statistics nor those published by the Antwerp Chamber of Commerce show what kinds of paper are imported, save the special classifications of cardboard and wall paper. All other sorts and qualities are classified as "paper undenominated."

In the kinds of paper in demand here I know of no difference from those in demand in the United States. As to commercial and private writing paper, there is as much variety and fancy in individual tastes as in the United States, and high grades are very much in demand. For editions de luxe publishers use Holland, Japan, and China paper.

GHENT.

From Consul Henry A. Johnson.

No data can be obtained that would permit giving even a rough approximation of the amount of different kinds of paper used in this district; but as it is an important manufacturing center an immense amount of packing is required both for the export and domestic trade, especially in cotton and linen textiles, so that the classes of paper most extensively consumed consist chiefly of wrapping paper used for packing and preparing this class of goods for the market.

The use of carbon papers is increasing as the typewriter is becoming more generally adopted by the business concerns of the district, the cheaper German grades being apparently preferred up to the present time. Of late there has been an increase in the demand for American carbon papers which, on account of their superior quality, are doubtless destined to eventually displace those from other countries.

The prospects for successfully introducing American paper on the market could, under existing conditions, hardly be looked upon as encouraging, and so long as the costs of labor do not materially advance it is likely that competition with the Belgian mills will prove difficult or impossible. Should it be possible, however, to extend the sale of American paper or paper products in this district, Ghent could hardly be destined to become a center of importation for this class of goods, as it would be found more advantageous to establish direct connection with Brussels or Antwerp, where distributing centers could be most conveniently established.

Wages in the paper-making industry of this district, as measured by American standard, would be considered as low, ranging from 3 francs ($0.57) per day for the unskilled to a maximum of 8 francs ($1.54) for the skilled male worker, while women and girls who form an important proportion of the working force in this industry are paid from 2 francs ($0.38) to 5 francs ($0.96) per day. On the score of efficiency the labor here may be said to compare favorably with that of the leading industrial localities of Europe. The equipment for mills in this district is chiefly supplied by domestic manufacturers, mainly by a factory located at Huy, while German and English machinery is exclusively used for cutting, rewinding, and calendering.

As to the wholesale prices of raw materials of domestic and foreign production, quotations naturally depend upon the conditions of the market fluctuating from day to day.

LIEGE.

From Consul A. Heingartner.

The local consumption of paper is supplied by Belgian manufacturers. There are three paper mills in this consular district making every variety of writing, book, print, and wrapping paper, with a total output of 600 tons per week.

There are no wholesale dealers in Liege, the trade being supplied by the mills or by dealers in Brussels. There are no large buyers of paper, the governmental offices and railways being supplied from headquarters in Brussels.

The declared export of paper from this consular district to the United States for 1913 was valued at $8,109, against $18,269 in 1912.

FRANCE.

PARIS.

From Consul General Frank H. Mason.

Although, as is the case in most French industries, no statistics of production are compiled, such figures being regarded by manufacturers as secrets to be jealously guarded, it may, nevertheless, be safely said that the local paper industry is quite capable of supplying all the ordinary demands of trade. Special emphasis is laid on the expression "ordinary demands," the significance of which will be explained under the subheading "Foreign supplies."

The greater number of the French paper factories are situated in almost inaccessible spots, as far removed as possible from large cities and the locality of other factories. This is, of course, due to the need for a perfectly pure water supply, upon which depends the clearness of the paper. It has only been possible to visit one factory in the consular district of Paris, and this is situated in the small village of Fontaine, in the Department of the Loir and Cher, about 100 miles from Paris. It is admirably supplied with an almost perfect quality of water drawn from the little river, the "Loir," which is not to be confounded with the "Loire," one of the four great rivers of France.

Almost every variety of paper is made in this factory, which, its managers state, may be considered quite a model institution. There can be seen, in process of manufacture at the same time, high and low grades of writing paper, wrapping paper, and even paper for newspaper printing. An infinite variety of sizes are cut, both for stock and to order.

The machinery, consisting of the latest models produced by French, British, and German builders, is always in operation, and the factory is worked by two shifts of each about 40 men and women, who start duty, respectively, at midnight and midday. The working hours of each shift are 10 per day, and each employee has two breaks of 1 hour each for meals. Wages are paid to ordinary workmen at the rate of 4 francs ($0.772) per day.

This factory uses only wood pulp. There are a few other factories which make use of rags, waste paper, and cuttings of paper, the latter of which can be purchased from wholesale paper dealers at 2 francs per 100 kilos, or 17½ cents per 100 pounds, but wood pulp forms the bulk of the French supply of raw material for paper making.

The following table shows the total imports of wood pulp, in metric tons, for the years 1911 and 1912, the latest years for which full official statistics are available, and likewise the countries from which supplies are drawn:

Countries.	1911	1912	Countries.	1911	1912
MECHANICAL PULP.	*Metric tons.*	*Metric tons.*	CHEMICAL PULP.	*Metric tons.*	*Metric tons.*
Russia	7,282	14,292	Russia	4,561	4,257
Sweden	73,391	86,580	Sweden	64,472	68,260
Norway	99,941	123,172	Norway	26,561	32,672
Germany	4,857	5,168	Germany	38,835	39,873
Canada	4,003	4,015	Netherlands	None.	2,803
Other foreign countries	1,870	1,395	Belgium	6,651	4,288
French colonies	204	18	Switzerland	4,448	4,878
			Austria-Hungary	24,092	25,724
Total	191,548	234,640	United States	2,099	2,706
			Other foreign countries	507	580
			Total	172,226	186,050

As has already been mentioned, a small quantity of rags, waste paper, and cuttings is used for paper making. The French wood supply is, however, too limited to make it a factor in the supply of wood pulp. It is thus evident that France is largely dependent upon foreign sources for its raw materials for the paper industry. This statement is fully borne out by the fact that, during 1912, 420,690 metric tons of wood pulp were imported into France.

FOREIGN SUPPLIES OF PAPER.

As was mentioned in the first paragraph of this report, the local industry is quite capable of taking care of French requirements in the matter of low-grade papers of all descriptions and even to a certain extent of the higher grades. As will be seen in a subsequent paragraph, France even exports considerable quantities of paper of all kinds.

In regard to the possible sale of foreign papers in France, F. Lachnitt, 12 rue du Helder, Paris, a prominent paper agent, made the following statement to the consulate:

> Imports from the United States or elsewhere are only possible on a question of price, or when the manufacturer has made a "specialty" of some particular line. For instance, England sends us very high-grade, glossy, writing paper. Germany sends paper of very close texture, known as "Crystal," and certain other countries likewise have their "specialties."

In the matter of low-grade papers, there is every advantage to import the raw material (wood pulp) at rates of duty varying from $0.044 to $0.22 per 100 pounds, and manufacture locally where wages are, on an average, 4 francs ($0.77) per day, rather than import the finished article paying a much higher rate of duty (as will be seen in a subsequent table) and manufactured in a country paying wages on a much higher scale.

On the other hand, as Mr. Lachnitt states, and he may be considered an authority on the subject, if a country has a specialty, it is possible to create a sale, no matter what the price may be, as it is chiefly a matter of fashion.

With reference to the questions of duty mentioned above, the following table, showing the import rates on both raw materials and certain of the finished articles, will be both of interest and instructive:

Articles.	Minimum rate.	Special rate paid on American imports.
IMPORT DUTY ON WOOD PULP.	*Per 100 lbs.*	*Per 100 lbs.*
Chemical pulp	[1] $0.17	$0.22
Mechanical pulp (dry)	[1] .088	.13
Mechanical pulp (moist)	[1] .044	.066
IMPORT DUTIES ON PAPER.		
Ordinary paper (lowest rates)	[2] .88	1.13
Fancy paper (lowest rates)	[2] 2.63	3.16

[1] Paid on European and Canadian imports.

[2] Paid on European imports.

It will be noted above that the United States is exceptionally badly placed as regards French import trade, American wood pulp and paper paying in each case a higher rate of duty than European countries and Canada. This appears to constitute a very serious handicap to American export trade to France.

FRENCH IMPORTS AND EXPORTS OF PAPER.

The following table shows the total imports and exports of paper, in metric tons, as classified by the French customs authorities, for the years 1911 and 1912, together with the countries of origin:

Articles and countries.	1911	1912
IMPORTS	*Metric tons.*	*Metric tons.*
So-called fancy paper:		
United Kingdom	69	88
Germany	437	463
Belgium	103	82
Switzerland	24	31
Austria-Hungary	28	35
United States	15	14
Other countries	17	18
Total	693	731
So-called ordinary paper:		
Sweden	460	801
Norway	148	336
United Kingdom	6,878	6,977
Germany	4,280	3,942
Netherlands	399	491
Belgium	935	605
United States	107	120
Other countries	299	352
French colonies	16	6
Total	13,522	13,630
EXPORTS.		
So-called fancy paper:		
United States	49	None.
United Kingdom	965	904
EXPORTS—continued.	*Metric tons.*	*Metric tons.*
So-called fancy paper—Contd.		
Germany	100	105
Switzerland	None.	104
Italy	70	175
Mexico	23	81
Argentina	39	29
Other countries	745	317
French colonies	153	130
Total	2,144	1,845
So-called ordinary paper:		
United Kingdom	3,661	3,859
Germany	983	1,142
Belgium	1,773	2,568
Switzerland	1,289	1,120
Turkey	1,210	1,530
Egypt	4,627	4,062
United States	2,072	2,602
Mexico	606	601
Colombia	142	124
Brazil	501	573
Argentina	810	759
Chile	133	176
Canada	96	181
Other countries	2,373	3,072
French colonies	16,046	18,212
Total	36,322	40,581

COGNAC.

From Consul Kenneth S. Patton.

Practically every form and kind of paper is used to some extent in this consular district, but that which is most in demand is a form of tissue paper to dress brandy bottles. Newspaper and typewriter paper are also considerably used, as well as heavy wrapping paper.

Practically the whole supply is of domestic production, of which the larger proportion comes from the mills around Angouleme. A small quantity of carbon, note, and typewriter paper is of English origin, although it is not imported directly, and a small part of the wall paper finds its way here from Belgium through the medium of French firms. American paper would find a very difficult market here owing to the proximity of the Angouleme mills, which produce nearly every form of paper, except carbon and wall paper. Local dealers state that the cost of transportation, given the keen competition, is the controlling factor, and obliges them to purchase from the nearest factory, except in the case of the higher grade writing papers. The one field of possible opportunity for the American manufacturer is that of high-grade linen note and typewriter paper and carbon paper, of which a part now comes from England. Purchases of these high-grade papers are made from Paris firms carrying a stock, and no direct importation is attempted to any extent by local firms.

It is estimated that 90,000,000 sheets of tissue paper for wrapping brandy bottles is consumed here annually. This paper comes largely from the French Pyrenees, the usual weight being 6 pounds per thousand sheets and the usual dimensions 18 by 14 inches. The total consumption is around 25 metric tons. Brandy houses pay at the rate of $0.65 per thousand for these wrappers. Purchases are made through commission merchants, the usual credit being 90 days.

A rough calculation, based on the number of newspapers in the district and their estimated circulation, places the total consumption of newspaper at 300 metric tons per annum. This paper is of very low-grade material, cheap in price, and is supplied by the nearest mill, as freight is the determining factor in the market. The mills around Angouleme furnish the largest part of this paper. It has been impossible to secure the wholesale price of this paper, but I have been told that American paper of this grade could not hope to compete with the local product.

MARKET REQUIREMENTS.

Typewriter paper for commercial correspondence is of both local and English origin, with the domestic product predominating. The English paper has the better reputation both as to finish and durability, but the French product has the advantage of proximity to the market and of lower prices. The brandy houses of the region, which annually export some $20,000,000 worth of brandy, naturally require a high-grade, thin, durable paper for their foreign correspondence, in which they take great pride. The form usually employed is 8.27 by 10.63 inches. The English product retails at prices varying from $0.58 to $1.83 per ream. The French article of same dimensions, weighing 3.30 pounds per 500 sheets, and of good quality, sells for $0.72 per ream in the retail market. English duplicating paper, of same dimensions as the regular typewriting paper, sells at retail for from $0.48 to $1.01, while the French product of slightly inferior quality sells at proportionately lower rates. The total consumption of typewriter paper can not even be estimated, but it is proportionately high for a city of 19,000 inhabitants.

The best grade of linen note paper is of English origin, but the bulk of that sold here is of French manufacture (Angouleme), fashioned to look like the British goods. The usual size of a sheet is 12 by 7¾ inches, folded once. The retail prices run from 20 to 60 cents a box of 50 sheets and 50 envelopes. Cards for short correspondence or invitations, measuring 3¾ by 5¾ inches, retail from 8 to 20 cents a box of 50, with envelopes to match. Prices on note paper and cards are not controlled absolutely by the grade of paper but rather by the attractiveness of the way it is put on the market.

Ordinary wrapping paper used in the stores and shops of the district is manufactured at Angouleme. The ordinary size for usual store purposes is 1 meter by 0.65 meter (3.82 by 2.48 feet). The smaller sizes are obtained by progressively halving the dimensions. The smallest size is 0.985 by 0.62 foot. This paper wholesales for 33 francs ($6.37) per quintal (220.46 pounds). A heavy glazed wrapping paper from Bordeaux, measuring 4 feet 8¾ inches square, is used for furniture packing. The wholesale price is 39 francs ($7.53) per quintal (220.46 pounds), delivery to destination included.

Butchers use a coarse brown paper similar to that employed by them in the United States. The usual dimensions of this paper are 20 by 25 inches, and the wholesale price is 19 francs ($3.67) per quintal (220.46 pounds). The chief source of supply is Angouleme, although some of it comes from Limoges.

Delicatessen shops and creameries use a kind of sulphurized, impermeable paper as the first wrapper for butter and other greasy products. The full-sized sheets of this paper measure 52 by 82 inches. Angouleme is the chief source of supply. The wholesale price is 115 francs ($22.20) per quintal (220.46 pounds), transportation charges extra. The wrapping paper employed by confectioners and also by the delicatessen shops and creameries as a second or outside wrapper wholesales at 45 francs ($8.69) per quintal (220.46 pounds), transportation charges extra. It comes from Angouleme.

Wall paper, selling in rolls of 8 meters (26 feet 3 inches) is usually of domestic manufacture, although some slight amount is reported as coming from Belgium. It retails at prices ranging from 0.30 francs ($0.059) to 4 francs ($0.77) per roll. It is said that the wholesale price rarely exceeds 50 per cent of the retail. Purchases are made direct from the factory in the case of French goods and from Paris firms in case of the Belgian article.

Carbon paper is of English or French manufacture with retail prices ranging from 9 francs ($1.74) per 100 sheets for the French to 20 francs ($3.86) for the best grade English copying carbons. The usual price is 11 francs ($2.12) per 100. Purchases are usually made direct from French factory in case of domestic goods or through houses in Paris in case of the English.

Blotting paper as a rule is of domestic manufacture, although some English blotting paper finds its way into the local market through the medium of Paris firms. The French article is thin and of poor quality as compared with the American product. The English article is heavier and better than the French, and this is reflected in the retail price, which is 2 cents per sheet (17.72 by 21.65 inches) for the French blotting paper and 5 cents for a similar sized sheet of the English product.

The foregoing discussion of the paper market of this district will give an accurate idea of the kinds of paper used here to any extent. Book paper and cardboard is little used, while bond and ledger paper has a comparatively small market. Local firms order their ledgers, etc., from Paris direct or through a local stationer.

PRODUCTION OF LOCAL MILLS.

As has already been stated, the manufacture of paper for this consular district is confined to the region around Angouleme. About 10 mills are in operation, producing nearly every form of paper except blotting, carbon, and wall paper. It is estimated that the average daily output of these mills is 50 metric tons (1 ton = 2,204.6 pounds), which means an annual production of about 15,000 metric tons. The raw material, save rags, which are gathered in the locality, consists of wood pulp, the bulk of which comes from Norway and the remainder from Canada. In 1913 the port of this district—La Rochelle—imported 8,825.30 metric tons of wood pulp. The number of workingmen employed is placed at 2,000, with an average daily wage of 4 francs ($0.77). They are reported to be industrious and efficient. The principal machinery of local paper mills is of French origin, except the calendars, which are German. The accessory tools and machinery are also German. Two German paper-making machines have been recently mounted near Angouleme, but nothing is known as yet as to the result of this experiment, and no comparison can be made for some time of the relative merits of the French and German machines. Water furnishes the motive force.

There is no direct exportation from the mills at Angouleme and a paper manufacturer states that little if any of the local product finds its way abroad.

Prices are usually quoted at so many francs (19.3 cents) per quintal (220.46 pounds), with 90 days'credit. In some cases the prices quoted include delivery to destination. Purchases of domestic paper, other than where expressly stipulated to the contrary in this report, are made direct from the manufacturer in quintal (220.46 pounds) lots. In the case of foreign products, purchases are made from Paris firms carrying a stock of foreign goods. Commercial travelers are not usual in this line, but they would be valuable to any concern attempting to find a new market for paper products. American firms desirous of reaching the local market should carry a stock at Paris of high-grade note and typewriter linen paper and carbon paper, using these as an entering wedge and employing commercial travelers as a means of exploiting their product. Cognac is the leading city of the district in paper consumption. Large users of paper in this district are the brandy houses and these concerns order their tissue paper through local representatives of French manufacturers, and their correspondence paper through local stationers. I have been personally informed that it is not worth their while to undertake the direct importation of paper consumed by them.

GRENOBLE.

From Consul Clarence Carrigan.

In the consular district of Grenoble the manufacture of paper is carried on on a large scale and forms one of the important industries of this part of France. There is attached to the University of Grenoble a school of paper making, where a complete course of instruction, theoretical and practical, is given in the manufacture of all sorts of paper. This course, which lasts two years, comprises the study of physics, chemistry, mathematics, mechanical and industrial designing, and mechanics, as well as a thorough study of paper making. The school is equipped with an up-to-date plant, and the graduate of this branch of the university training is competent to direct the manufacture of all classes of paper. In this way the industry is guarded and improved, just as the silk industry is advanced by the practical training offered in the commercial schools of Lyon. As a consequence of the broad interest taken in this manufacture, there is not a large market here for imported papers at the present time. Still the opinion is freely expressed that American wrapping papers should sell in this district as in other parts of France. This class of paper made in the United States is undoubtedly of better quality than the French products.

The raw materials principally used in the factories of this district are chemical and mechanical cellulose pulps. These pulps are largely imported from Norway, Sweden, and Germany, and the wholesale price of the mechanical pulp is given as 15 francs ($2.90) per 100 kilos (220.46 pounds), while that of the chemical pulp is 24 francs ($4.63) per 100 kilos. A large quantity of wood pulp is also obtained for this industry from the native forests, and some is imported also from Norway and Sweden. White and colored rags are used, but on a lesser scale. They are obtained both here and abroad at prices ranging from 50 centimes ($0.10) to 1 franc ($0.193) per kilo (2.2 pounds).

It is interesting to note in this connection that an effort is said to have been made last February to reduce the French export tariff on rags used for paper making. This reduction was urged by the French railroad companies and would naturally act to the advantage of American purchasers of these rags. This effort to increase the foreign trade of France has been vigorously opposed by the union of French paper manufacturers. The increasing scarcity of these materials has worried the French manufacturers for a long time. Indeed, the scarcity of rags is now felt to such an extent that quantities of these materials are now imported from Spain, though the exportation of rags from that country is protected by a Spanish tariff.

Some of the equipment used in the local factories is imported from Germany, and here would seem to be a good field for American inquiry. The head of one of the largest factories here expressed a personal interest in the relative advantages of American machinery for this work and the possibility of importing it. It would be of small value merely to send catalogues in English to these concerns; but if letters were written, individually, in French to the directors of the different mills they might be seriously interested. The letters should, of course, be accompanied by proper descriptive matter.

HAVRE.

From Consul John Ball Osborne.

The sale for American paper is, as yet, unimportant and, with the exception of tracing, carbon, photographic, and sensitized paper, the American product pays the maximum rate of duty, whereas papers manufactured in Germany, Great Britain, Belgium, and certain other European countries are imported into France under the minimum tariff. Notwithstanding this, however, and the comparatively low rates of freight from neighboring nations, the United States ships a certain quantity of cardboard to France annually.

While France has met with considerable competition on the part of foreign manufacturers of wrapping, note, letter, and fancy papers, she still maintains her position as a producer of high-grade tissue and cigarette paper, Belgium, Egypt, and the United States being among her best customers for this particular article.

TOILET PAPER.

Sanitary tissue paper is manufactured extensively in France, especially in Paris and its suburbs (Courbevoie, Boulogne-sur-Seine, etc.) and in Bordeaux. None is manufactured in this district. Imported paper comes mostly from Germany. How much it is not possible to state, since the official statistics of paper imports do not differentiate this class of merchandise.

The French paper retails as follows:

Bronco, in rolls	per roll..	$0.125
Perfumed Perforated, in rolls	do....	.125
Ideal Sanitaire, in rolls	do....	.058
Sanico, in rolls	do....	.048
Ideal, in blocks	per block..	.125
Japonais, in blocks	do....	.125
Lune, in blocks	do....	.145

German paper marked "Jodler" sells for $0.096 per roll.

The French rolls vary in weight from 250 grams (8.82 ounces) to 370 grams (13.05 ounces). Their dimensions are 9.5 centimeters (3.7 inches) in width and 12.5 centimeters (4.9 inches) in diameter. The German rolls weigh 230 grams (8.1 ounces) and have a diameter of 12 centimeters (4.7 inches) and a width of 12 centimeters (4.7 inches).

The dimensions and weight of the packages are as follows: Length, from 14 centimeters (5.5 inches) to 20 centimeters (7.9 inches); width, from 10 centimeters (3.9 inches) to 14.5 centimeters (5.7 inches); thickness, from 3 centimeters (1.2 inches) to 4 centimeters (1.6 inches).

The cheapest grade appears to be the best seller. It is, however, too coarse and thick and might well be improved in quality.

There are several public comfort stations at Havre operated by a private company under a concession from the municipality. The charge for their use is 2, 3, and 5 cents, always including toilet paper. The last-mentioned rate includes soap and towel.

Both rolls and patented devices are used in the principal hotels of Havre, paper being furnished free to guests.

CREDIT TERMS AND IMPORT DUTIES.

In the wholesale trade sales are usually made at 90 days, with a discount of 2½ per cent for cash. In the retail trade a discount of 2 per cent is allowed for cash for 50 or more rolls or packages.

The tariff rates for imports into France of tissue paper from the United States are as follows:

Tariff No. 461.—Weighing, per square meter (10.764 square feet), more than 30 grams (1.06 ounces), 13 francs ($2.51) per 100 kilos (220.46 pounds), equivalent to $1.13 per 100 pounds; weighing, per square meter (10.764 square feet), 30 grams (1.06 ounces) or less, 23 francs ($4.44) per 100 kilos (220.46 pounds) equivalent to $2.01 per 100 pounds.

Making due allowance for freight and duty, I believe that there is a favorable opening for the introduction here and elsewhere in France of American toilet paper of the quality commonly retailed in the United States at three rolls for 25 cents.

PAPER TOWELS.

So far as can be ascertained, paper towels have never been used in Havre. Conditions, however, seem to favor the introduction of the American product. Hotel keepers who have been interviewed are favorably impressed with their advantages, although they express some apprehension as to their cost. They state that the ordinary roll towel is not expensive, since it is changed only about once every two days and the cost of washing is less than 1 cent. The consumption of paper towels would necessarily be large and the cost rather high. Some of those interviewed have expressed the desire to make a trial of the product provided free samples are furnished. The opinion of the buyer of the Galeries du Havre, the best equipped department store in this city, is that there might be a demand for these towels in this city, but his house would not care to make an experiment unless the manufacturer enabled it to do so on a small scale.

The toilet establishment at the railway station is operated by a private company and the admission charge is sufficient to allow a profit on the toilet articles furnished, such as soap, paper towels, comb, brush, etc.

A sample paper towel being shown to the customs authorities, they state that this product would be classified under tariff No. 461 and that the rates are the same as those given above for toilet paper.

It is the general opinion than an exclusive agency for sanitary paper articles is the only way to place successfully these goods on the market since the local demand is limited.

In order to interest the French trade it is absolutely necessary to enable the dealers to make a free trial, or at least to furnish them with an abundant supply of free samples at the outset. It is not believed that any French firm will take up a novel line of this kind without a preliminary test. Hotel keepers will not buy paper towels or similar articles without first testing them, and they are not disposed to invest any money in the test, which must be at the expense of the manufacturer.

The language of the country being French the advertising matter and wrappings should be printed in the French language, to be most effective, with French currency and metric denominations. Although imported products must bear a statement of their origin, descriptions in the French language are desirable even although English terms may be well understood. This is the candid opinion of local buyers.

LIMOGES.

From Vice Consul John J. Ernster.

The needs of Limoges for paper are writing paper, book papers, news paper, wrapping paper, wall paper, tissue paper, chromo or transfer paper, blotting, carbon, and photographic papers, and boards of all kinds. No direct importations of any of these articles from foreign countries are made, and with the exception of the wrapping paper and board, which is manufactured in this consular district, and of the tissue paper, which is purchased in Lyon, Department of Rhone, all of it is purchased in Paris from French manufacturers and merchants or from agents of foreign firms. The merchants and other large users of paper inform me that they have no objection to, and for certain work would prefer to, use paper of American manufacture, providing that they would be able to purchase the same from some central agency in France, and that the sizes and other requirements would conform to French standards. They do not care to import directly, or even to become the agents for foreign manufacturers, as none of them keeps any considerable stock on hand, and also because in time of need the delay in procuring the foreign article would not compensate for the difference in price.

LYON.

From Consul F. Van Dyne.

There are said to be manufactured daily in France at the present time some 3,000 tons of paper, and of this amount probably one-half consists of writing paper, the rest being wrapping and cigarette paper, cardboard, etc. As the importations of paper into France have increased steadily from year to year, there would seem to be a good market for foreign products. In the year 1905, the value of the imports of paper into France was 13,795,000 francs ($2,662,435), while in 1911 the imports had increased to a value of 38,035,000 francs ($7,340,755). It has been stated, in a carefully prepared article on the French industry, that a good market exists in this country for the importation of wrapping papers. As far as concerns this particular district, the opinion prevails here that the French papers are amply sufficient to meet the present demand. There should, however, be a good opening for the sale of American wrapping papers, especially of the heavier and stronger qualities. The papers sold here for this purpose are not of so fine a texture as the American products, and they also lack their strength.

The sizes of the various papers sold here are practically the same as those of the corresponding American papers, both as regards the writing papers and the larger kinds.

There are in France at the present time 330 factories for paper making, employing from 25,000 to 30,000 workmen. Taking an average of newspaper materials, wrapping, writing, cigarette papers, and cardboard, the annual consumption of paper in this country amounts probably to 14 kilos. (30.86 pounds) per person. The largest imports of the finished product come from Germany, England, and Belgium.

As France is not rich in forests and the greatest care must be exercised for the conservation and replanting of her trees, a large quantity of wood pulp is annually imported from Norway, Sweden, Germany, and Canada. On the other hand, the rags and other waste materials resulting from the cloth manufacturing industries of this country are very valuable in the manufacture of paper. The wholesale prices (per 100 kilos, or 220.46 pounds), at which these rags are sold in the Lyon district are as follows:

Kinds.	Francs.	Dollars.
Mixed white, country origin, 70 per cent linen	30-31	5.79-5.98
Gray, city origin, pure linen	30-33	5.79-6.37
Blue linen	12-14	2.32-2.70
Mixed, city origin	15-16	2.90-3.09
White, soiled	20-25	3.86-4.83
Cottons, mixed	8-12	1.54-2.32
White cord	30-36	5.79-6.95
Cord, coal-tarred	25-30	4.83-5.79

As to the prices of the papers themselves, paper used for newspapers and other journals ranges, at wholesale, from 28 francs to 35 francs ($5.40 to $6.76) per 100 kilos (220.46 pounds). Other papers used for printing purposes are more expensive, the prices running as high as 80 francs ($15.44) per 100 kilos, according to quality. Some of the finer grades of paper, especially writing papers, run as high as 120 francs ($23.16) per 100 kilos. The most expensive papers made in France are photographic products.

It is unfortunately impossible to obtain any figures showing the amounts of the various papers used in this district. Statistics of imports, exports, and consumption are given only for the whole of France, and not for the different Departments. It will be seen that it is very difficult to give a definite statement as to the demand that may exist in this district, as this demand could only be gauged by statistics which are not available.

The large paper dealers in Lyon are, as a rule, direct representatives of certain manufacturers, and are consequently not especially interested in the introduction of foreign papers. If there could be, however, a central agency for American wrapping paper in France, say at Paris, this product would probably sell well in this part of France. The quantity consumed here would not warrant the introduction of this paper direct from the United States; but, if the local concerns could buy through a central agency, it is probable that this district would prove an interesting part of the French market.

Toilet papers are sold here at wholesale at the rate of 60 francs ($11.58) per 100 kilos (220.46 pounds). On this price the wholesale distributer makes a profit of from 15 to 20 per cent, while the retailer expects a profit of from 25 to 30 per cent on his retail price.

The prevailing credits in the sale of toilet papers allow 30 days, and 1 per cent discount for cash payment.

MARSEILLE AND TUNIS.

From Consul General Alphonse Gaulin.

Paper of almost every description is used in the Marseille district. The bulk of the supply is of French manufacture, but high-grade stationery and certain specialties of foreign origin are in fairly good demand. American trade in this line has, however, been practically limited thus far to typewriter supplies, chiefly carbon paper, and it is handicapped by conditions which are reviewed further in this report.

On the other hand, England, Germany, and Belgium have a well-established trade in the district. The English manufacturers supply a large amount of high-grade correspondence paper, the greater part of which is also imported indirectly and does not appear in the local customs statistics. They also do a larger business in wall paper than is indicated by these returns. German exports to this section chiefly comprise cover paper, bristol board, and pasteboard in sheets; Belgian, sulphurated paper; Austrian, colored and cover paper.

It is probable that American manufacturers could secure part of this trade if customs tariff conditions were equalized, but under the present system this is extremely doubtful. All the above-mentioned countries enjoy the privilege of the minimum tariff, while American goods are subject, in most cases, to the maximum rates of duty. Moreover, our principal competitors have the advantage of lower transportation charges, an average difference of about $1.25 per metric ton.

English and German paper manufacturers also maintain depots in Paris and a few other centers from which retailers are readily supplied. Besides, goods are frequently sent on consignment to leading stationers, accounts being settled at stated intervals and payments made only for the merchandise disposed of. Wholesalers are usually allowed discounts of 2 to 5 per cent for payment within 30 days, exclusive of the month of delivery. Net prices are quoted at 60 days, in addition to the month in which goods are delivered.

In order to establish in this district a profitable trade in this line, American manufacturers should be represented and maintain depots in Marseille, or at least in Paris.

THE TUNISIAN MARKET.

There appears to be under existing conditions a better opening for the American paper trade in Tunisia than in southern France. In the first place, there is no customs tariff discrimination in favor of any country as regards products of this description. Moreover, the consumption of paper of every kind is rapidly increasing in the regency, and the inhabitants are already well disposed toward American-made goods.

The Tunisian trade could easily be reached through Marseille firms. It would not be necessary to establish direct relations at the start.

Official statistics covering imports of paper into Tunisia during 1913 are not yet available, but the following table from the Documents Statistiques sur le Commerce de la Tunisie, 1912, shows the quantities and values of these imports:

Articles and countries.	Quantity.	Value.
	Metric tons.	
Wrapping paper:		
France	1,384.0	$59,747
Belgium	184.0	9,171
Algeria	75.0	2,430
Other countries	200.0	9,122
Total	1,843.0	80,470
Writing paper and cardboard:		
France	204.0	38,214
Italy	55.0	7,302
Austria	30.0	3,129
Other countries	61.0	7,100
Total	350.0	55,745
Printing paper:		
France	647.0	44,494
Belgium	102.0	5,534
Austria	35.0	2,799
Other countries	37.0	2,279
Total	821.0	55,106
"Fancy" paper:		
France	6.7	786
Austria	.5	133
Other countries	.1	37
Total	7.3	956
Other paper:		
France	464.0	29,947
Belgium	3.0	335
Austria	3.0	1,408
Other countries	8.0	1,506
Total	478.0	33,195
Wall paper:		
France	56.0	8,045
Germany	18.0	1,692
Algeria	3.0	394
Other countries	3.0	450
Total	80.0	10,581
Sulphurated paper: France	1.0	$275
Photographic paper:		
France	.5	294
Algeria	.1	1,582
Germany	.1	10
Total	.7	1,886
Pasteboard, rough, in sheets:		
France	127.0	5,552
Belgium	31.0	971
Austria	30.0	1,376
Other countries	9.0	265
Total	197.0	8,164
Pasteboard, cut or shaped for boxes:		
France	22.0	2,614
Germany	3.0	449
Belgium	1.0	115
Other countries	.5	158
Total	26.5	3,336
Cardboard goods, ornamented with paintings, reliefs, etc.:		
France	3.0	625
United Kingdom	.5	35
Germany	.1	23
Other countries	.4	50
Total	4.0	733
Articles of cardboard or cellulose:		
France	8.0	1,987
Germany	3.0	1,075
Italy	1.0	258
Other countries	1.0	237
Total	13.0	3,557

In Tunisia there is no paper-manufacturing industry, and the consumption is comparatively very small, as will be seen by the table of imports given above. The relative unimportance of the paper trade in the regency, which has a population of 1,900,000, is due to the large proportion of illiterates.

There are no special requirements peculiar to this district in regard to size, weight, or finish. Conditions in this respect do not differ materially from those prevailing in the United States.

Every grade of writing paper for social and commercial correspondence is sold here, but medium grades are in greatest demand. Lightweight paper is generally preferred.

LOCAL PRODUCTION.

There exists in Tunisia an abundant supply of alfa; but this material has not been used to any extent in this district. The other local materials available for paper manufacture are corn and oat straw, waste paper, old rope, rags, and wood pulp. Wood pulp, however, is mainly imported from Austria, Sweden, and the United States, these imports amounting to about 1,800 metric tons (1 ton = 2,204.6 pounds).

The average cost of straw is 4.60 francs per 100 kilos (88.7 cents per 220.46 pounds). Alfa is worth from 17 to 18 francs ($3.28 to $3.47) for the same quantity. Prices of wood pulp have ranged from 9.50 francs to 33 francs ($1.83 to $6.37) per 100 kilos, according to kind and quality; waste paper, from 3.50 francs to 20 francs ($0.67 to $3.86); large tarred rope, from 18 to 25 francs ($3.47 to $4.82); small tarred rope, from 10 to 18 francs ($1.93 to $3.47); large white rope, from 26 to 32 francs ($5.02 to $6.17); new white twine, from 30 to 38 francs ($5.79 to $7.33); cotton rags, from 15 to 40 francs ($2.89 to $7.72); other rags, from 35 to 85 francs ($6.75 to $16.40).

Most of the mills in this district are equipped with modern machinery, principally of French origin, but partly also of German and English manufacture. Machinery is not used, however, to the same extent as in American mills, and in the opinion of French experts the cost of production is as high as in the United States, in spite of cheaper labor. Wages range from 2.50 francs to 6 francs ($0.48 to $1.16) in the local mills, with an average of 3.75 francs ($0.72) per day.

The sale of American machinery of this description in the Marseille district would require representation either in the city of Marseille or at least in Paris.

PRICES.

Paper is usually sold in France per 100 kilos (220.46 pounds), either in reams, according to their nominal weight, or in rolls. The ream is generally of 500 sheets, except for wrapping and filtering papers, which are frequently sold in reams of 480 sheets. The weight of paper in rolls is fixed in grams per square meter.

The ruling prices for current grades in the Marseille market at the present time are as follows:

Kinds of paper.	Unit of quantity.	Prices.	
		Francs.	Dollars.
Letter (French)	220 lbs	50.00- 275.00	9.65- 53.07
Letter (foreign)	220 lbs	76.00- 280.00	14.67- 54.04
Ledger (French)	220 lbs	70.00- 190.00	13.51- 36.67
Drawing (in sheets 22 by 30 inches; 19 by 24½ inches; 19½ by 25½ inches) (French).	Ream	23.50- 35.00	4.53- 6.75
Drawing, cloth-lined (French)	Square meter (10.76 sq. ft.)	.70- 1.10	.13- .21
Tracing, natural vegetable (in sheets, various sizes) (French).	Ream	20.00- 350.00	3.86- 67.55
Printing:			
Newspaper (French)	220 lbs	29.00- 35.00	5.59- 6.75
Other (French)	220 lbs	36.00- 80.00	6.95- 15.44
Lithographing (French)	220 lbs	56.00- 160.00	10.81- 30.88
Lithographing (foreign)	220 lbs	65.00- 160.00	12.54- 30.88
Carbon, foolscap (mostly foreign)	1,000 sheets	40.00- 140.00	7.72- 27.02
Wrapping (French)	220 lbs	18.00- 130.00	3.47- 25.09
Wrapping (foreign)	220 lbs	60.00- 130.00	11.58- 25.09
Blotting (French)	220 lbs	60.00- 175.00	11.58- 33.77
Blotting (foreign)	220 lbs	90.00- 140.00	17.37- 27.02
Filter (French)	220 lbs	80.00- 160.00	15.44- 30.88
Toilet, tissue (French)	220 lbs	40.00- 60.00	7.72- 11.58
Cigarette (French)	220 lbs	30.00- 250.00	5.79- 48.25
Cover (French)	220 lbs	42.00- 50.00	8.10- 9.65
Cover (foreign)	220 lbs	46.00- 84.00	8.88- 16.21
Strawboard (French)	220 lbs	18.00- 22.00	3.47- 4.24
Boxboard, corrugated (French)	220 lbs	24.00- 27.00	4.63- 5.21
Bristol and ivory board (French)	220 lbs	60.00- 85.00	11.58- 16.40
Bristol and ivory board (foreign)	220 lbs	80.00- 100.00	15.44- 19.30
Wall paper (French and foreign)	100 rolls of 8 meters (26.25 ft. length).	36.00-3,000.00	6.93-579.00

The following kinds and quantities of paper were handled in the Marseille market:

Kinds of paper.	Quantity.	Kinds of paper.	Quantity.
	Tons.		*Tons.*
Writing	4,000	Cover	100
Printing:		Toilet tissue	1,000
News	22,000	Boards	25,000
Other	6,000	All other kinds	2,000
Wrapping	18,000		78,750
Wall	500		
Blotting	150		

The standard sizes of paper and paper boards are shown in the following table:

Trade names.	Dimensions in centimeters.	Dimensions in inches (approximate).	Trade names.	Dimensions in centimeters.	Dimensions in inches (approximate).
PAPER.			Colombier	63 by 90	24¾ by 35½
			Grand Colombier	66 by 92	26 by 36¼
Procureur	26 by 35	10¼ by 13¾	Atlas or Journal	65 by 94	25½ by 37
Cloche	30 by 40	11¾ by 15¾	Petit Aigle	70 by 94	27½ by 37
Pot	31 by 40	12¼ by 15¾	Grand Aigle	75 by 106	29½ by 41¾
Florette	32 by 40	12½ by 15¾	Grand Monde	90 by 126	35½ by 49½
Tellure	33 by 44	13 by 17¼	Univers	100 by 130	39½ by 51¼
Couronne (ledger)	36 by 46	14¼ by 18			
Couronne (printing)	37 by 48	14½ by 19	PAPER BOARDS.		
Ecu	40 by 52	15¾ by 20½	Ecu	42 by 57	16½ by 22½
Coquille	44 by 56	17¼ by 22	Pot Double	45 by 67	17¾ by 26½
Carré	45 by 56	17¾ by 22	Carré	47 by 62	18½ by 24½
Medium	46 by 59	18⅛ by 23¼	Couronne Double	50 by 78	19¾ by 30¾
Cavalier	46 by 62	18⅛ by 24½	Grand Raisin	52 by 67	20½ by 26½
Petit Raisin	48 by 63	19 by 24¾	Jésus	58 by 78	22¾ by 30¾
Raisin	50 by 65	19¾ by 25½	Soleil	60 by 82	23½ by 33¼
Jésus (music)	54 by 70	21¼ by 27½	Colombier	71 by 100	28 by 39½
Jésus	56 by 72	22 by 28¼	Petit Aigle	75 by 105	29½ by 41½
Grand Jésus	56 by 76	22 by 30	Grand Aigle	80 by 114	31½ by 44⅞
Pittoresque	57 by 78	22½ by 30¾	Grand Monde	90 by 125	35½ by 49¼
Soleil	58 by 80	22¾ by 31½	Grand Univers	100 by 148	39½ by 58¼
Grand Soleil	60 by 80	23½ by 31½			
Elephant	62 by 77	24½ by 30¼			

TOILET PAPER.

It is stated that the retailers expect from 40 to 50 per cent profit on toilet paper, and the wholesale distributors 10 per cent. Retailers purchase their supplies chiefly from travelers representing the manufacturers and also from jobbers and local agents. The latter usually receive a commission of 10 per cent, plus the expenses incurred for delivering the merchandise to the buyers, but they assume, as a rule, the warehouse charges. The customary terms of sale are 60 days net, 30 days 2 per cent discount, cash with 2 per cent to 4 per cent discount, according to importance of customers.

In order to introduce American-made toilet paper in this district it will be necessary to send a sample stock to a Marseille representative, free of all charges. Correspondence should be in French, and prices quoted c. i. f. Marseille, duty paid.

PAPER EXPORTS AT MARSEILLE.

The quantities of the various kinds of paper exported from Marseille during the last two calendar years, the figures being compiled from the local customhouse returns, are shown below:

Articles and countries.	1912		1913	
	General commerce.	Special commerce.	General commerce.	Special commerce.
Fancy paper and cardboard:	*Metric tons.*	*Metric tons.*	*Metric tons.*	*Metric tons.*
Turkey	44.0	41.0	16.0	16.0
Morocco	37.0	37.0	39.0	39.0
Mauritius	20.0	20.0	16.0	16.0
British India	15.0	15.0	17.0	17.0
Tunisia	21.0	21.0	5.0	5.0
Indo-China	13.0	13.0	5.0	5.0
Portugal	....	....	28.0	28.0
All other countries	51.0	33.0	64.0	35.0
Total	201.0	180.0	190.0	161.0
Other paper and cardboard:				
Egypt	1,735.0	1,716.0	1,609.0	1,607.0
Turkey	1,667.0	1,474.0	1,519.0	1,336.0
Tunisia	1,678.0	1,669.0	1,770.0	1,765.0
Indo-China	1,087.0	1,072.0	1,328.0	1,302.0
Morocco	365.0	364.0	464.0	464.0
United States	341.0	341.0	610.0	610.0
Argentina	270.0	268.0	289.0	278.0
All other countries	1,243.0	1,173.0	1,243.0	1,180.0
Total	8,396.0	8,077.0	8,832.0	8,542.0
Wall paper:				
Tunisia	37.0	37.0	17.0	17.0
Argentina	19.0	19.0	17.0	17.0
Madagascar	13.0	13.0	11.0	11.0
Spain	10.0	10.0	....	....
Italy	7.0	7.0	9.0	9.0
Egypt	9.0	9.0	9.0	9.0
Reunion	8.0	8.0	11.0	11.0
Indo-China	3.0	3.0	16.0	5.0
All other countries	17.0	12.0	6.0	4.0
Total	123.0	118.0	96.0	83.0
Sulphurated and semisulphurated paper:				
Italy	5.0	5.0	.4	.4
All other countries	5.0	5.0	.2	.2
Total	10.0	10.0	.6	.6
Photographic paper:				
Turkey	5.0	5.0	3.0	3.0
Brazil	1.0	1.0	1.0	1.0
Egypt	.8	.8	....	....
Argentina	.8	.8	....	....
Tunisia	.8	.8	1.0	1.0
Morocco	.5	.5	4.0	4.0
All other countries	2.1	2.1	5.0	5.0
Total	11.0	11.0	14.0	14.0
Pasteboard, rough, in sheets:				
Tunisia	80.0	80.0	93.0	89.0
Indo-China	51.0	51.0	66.0	65.0
Egypt	35.0	35.0	30.0	30.0
Morocco	29.0	29.0	50.0	50.0
Turkey	29.0	29.0	41.0	41.0
Spain	15.0	9.0	13.0	7.0
All other countries	44.0	29.0	122.0	87.0
Total	283.0	262.0	415.0	369.0
Pasteboard, cut, for boxes:				
Egypt	14.0	14.0	14.0	14.0
Tunisia	12.0	12.0	15.0	15.0
Indo-China	6.0	6.0	6.0	6.0
Turkey	4.0	4.0	13.0	13.0
Argentina	6.0	6.0	4.0	4.0
All other countries	9.0	9.0	19.0	19.0
Total	51.0	51.0	71.0	71.0

Articles and countries.	1912		1913	
	General commerce.	Special commerce.	General commerce.	Special commerce.
Cardboard boxes:	*Metric tons.*	*Metric tons.*	*Metric tons.*	*Metric tons.*
Indo-China	22.0	22.0	21.0	21.0
Egypt	21.0	21.0	24.0	24.0
Tunisia	14.0	14.0	15.0	15.0
Turkey	13.0	13.0	17.0	17.0
Morocco	9.0	9.0	12.0	12.0
Madagascar	9.0	9.0	9.0	9.0
Argentina	8.0	8.0	10.0	10.0
All other countries	36.0	31.0	40.0	31.0
Total	132.0	127.0	148.0	139.0
Cardboard in tubes:				
Indo-China	1.1	1.1	3.3	3.3
French India	.8	.8	2.0	1.6
All other countries	.6	.6	.7	.5
Total	2.5	2.5	6.0	5.4
Cardboard goods, ornamented with paintings, reliefs, etc.:				
Egypt	8.0	8.0	....	....
Argentina	3.3	3.3	....	....
Indo-China	3.0	3.0	8.4	8.4
Spain	3.2	3.2	....	....
Turkey	3.0	3.0	5.4	5.4
Morocco	2.0	2.0	7.0	7.0
Italy	.8	.8	6.0	6.0
All other countries	6.7	4.7	6.2	5.6
Total	30.0	28.0	33.0	32.4
Articles of cardboard and cellulose:				
Spain	15.0	.1	12.0	....
Tunisia	1.8	1.8	2.0	2.0
All other countries	3.2	2.1	3.0	2.0
Total	20.0	4.0	17.0	4.0

PAPER IMPORTS AT MARSEILLE.

The following table shows the quantities of the various kinds of paper directly imported at Marseille during the last two calendar years, figures being obtained from the local customhouse returns:

Articles and countries.	1912		1913	
	General commerce.	Special commerce.	General commerce.	Special commerce.
Fancy paper and cardboard:	*Metric tons.*	*Metric tons.*	*Metric tons.*	*Metric tons.*
Japan	12.0	0.1	26.5	....
Austria	16.5	16.5	19.0	19.0
Belgium	3.6	3.5	5.0	5.0
Germany	1.9	.2	2.7	1.0
United Kingdom	1.3	.4	.7	.3
All other countries	6.1	.2	.7	.1
Total	41.4	20.9	54.6	25.4
Other paper and cardboard:				
United Kingdom	212.0	126.0	295.0	70.0
Italy	138.0	.7	4.0	3.0
Belgium	35.0	33.0	7.0	6.0
Germany	16.0	10.0	33.0	30.0
Austria	12.0	1.0	....	....
Switzerland	46.0	....	27.0	....
United States	.5	.3	.2	.2
All other countries	38.5	18.0	27.8	10.8
Total	498.0	189.0	394.0	120.0

Articles and countries.	1912		1913	
	General commerce.	Special commerce.	General commerce.	Special commerce.
Wall paper:	*Metric tons.*	*Metric tons.*	*Metric tons.*	*Metric tons.*
United Kingdom	11.0	9.0	5.0	4.0
Germany	12.0	11.0	1.0	1.0
Netherlands	23.0	22.0	2.0	2.0
Switzerland	1.8	....	1.8	....
Other countries	.2	....	.2	1.0
Total	48.0	42.0	10.0	8.0
Sulphurated or semisulphurated paper:				
Belgium	13.8	13.8	27.8	27.8
Netherlands	4.9	4.9	....	....
United Kingdom	1.5	1.5	....	....
Italy	....	....	.2	.2
Total	20.2	20.2	28.0	28.0
Photographic paper:				
Germany	.1	.1	.3	.3
United Kingdom	.2	....	.2	.1
Switzerland	.2	....	....	....
Total	.5	.1	.5	.4
Pasteboard, rough, in sheets:				
Germany	124.0	117.0	101.0	101.0
United Kingdom	23.0	22.0	45.0	22.0
United States	5.0	....	14.0	....
Other countries	8.0	....	14.0	2.0
Total	160.0	139.0	174.0	125.0
Pasteboard, cut or shaped for boxes:				
Germany	.3	.3	.1	.1
Switzerland	.3	.1	.3	.2
Other countries	....	....	.1	.1
Total	.6	.4	.5	.4
Cardboard goods, ornamented with paintings, reliefs, etc.:				
United Kingdom	3.0	2.0	1.6	1.4
Germany	2.0	1.0	1.2	.8
Switzerland	1.0	.7	.5	.2
United States	.1	.1	....	....
All other countries	.5	.2	.1	.1
Total	6.6	4.0	3.4	2.5
Articles of cardboard or cellulose:				
Switzerland	10.0	.4	12.0	.1
Germany	1.0	1.0	.7	.5
Spain	.2	....	1.2	....
All other countries	6.8	.6	.1	....
Total	18.0	2.0	14.0	.6

NANTES.

From Consul Walter H. Schulz.

This region buys its supplies of paper either on the spot or through Parisian dealers. In spite of the excellent shipping facilities existing at Nantes, by transshipment from Havre or Bordeaux, or by the establishment of a direct line to the United States, better results could be obtained by reaching the Provinces through Paris. Agents could be appointed in that city whose traveling men would visit the trade generally and whose knowledge of credits and other factors would prove of great usefulness in the introduction of American goods.

The 1912 report on the commercial and industrial situation of the

Nantes Chamber of Commerce makes the following comment on the outlook in the paper industry:

> The price of all our raw materials, as also that of coal, having risen considerably without the sale price of paper having been able to follow an equal increase, our industry is entering at this moment an intense crisis still more aggravated by the ever-increasing demands of labor and social legislation.

This consular district is the seat of three paper mills of considerable size, and the region draws its supplies of such paper as they make from them. Principally they are engaged in the manufacture of the coarser kinds, the finer grades being furnished to the trade by Parisian houses.

No great book-printing activity exists in this district, but four newspapers appear daily. Apart from this the main openings for American products would have to be sought in the packing and correspondence paper line.

The standards of size do not differ appreciably from those in vogue in the United States, but the requirements as regards quality, weight, and finish are not so exigent here as in America. The paper used for commercial correspondence is of medium grade only, but that for social use is of the best quality and, to a large extent, is of English origin.

PRODUCTION OF LOCAL MILLS.

The three paper mills in this district are situated at Antiere, Tiffauges, and Chantenay, the first two towns being situated in the Department of Vendee, and the third in that of the Loire Inferieure.

According to the figures furnished by the company, Papeteries de l'Ouest, which owns all three mills, the establishments at Antiere and Tiffauges produce yearly an average amount of 16,000 to 18,000 tons, while 8,000 to 9,000 tons is the output of the Chantenay branch.

The raw materials entering into the composition of the papers manufactured here are principally: (1) Mechanical wood pulp, imported from Finland and Scandinavia; (2) chemical wood pulp, made in the district; (3) old paper and rags, collected in France or imported from England.

No forest land is to be found in this district, but this disadvantage is partly offset by the comparative facility with which raw material can be imported, vessels of from 4,000 to 5,000 tons being able to reach the wharves of the Chantenay factory.

Besides the three paper mills established here there is a factory of cellulose belonging to the same company. The figures of production are placed at 15,000 to 16,000 tons of pulp annually. The principal ingredients in the manufacture of this commodity are 100,000 steres (3,531,658 cubic feet) of wood; 4,000 tons of iron pyrites from Spain; chlorate of lime, bought in France.

The larger part of the pulp produced is consumed by the local trade, the surplus being disposed of in France. The Scandinavian and German product enters more and more into competition with the local one in spite of a protective tariff of 2 francs per 100 kilos ($0.38 per 220 pounds).

Correspondence paper ranges in price from 60 to 200 francs per 100 kilos ($10.58 to $38.60 per 220 pounds), while paper for packing and wrapping purposes is sold at from 30 to 70 francs per 100 kilos, or $5.29 to $13.51 per 220 pounds.

The weekly wages paid in the mills are as follows: Men, from 25 to 30 francs ($4.82 to $5.79); women, from 18 to 23 francs ($3.47 to $4.43).

The following table shows the movements in this district for the last five years:

	1908	1909	1910	1911	1912
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Imports	352,220	317,680	315,920	270,820	256,880
Exports	130,460	172,920	152,900	179,520	435,600

It will be noticed that the district is becoming an exporter rather than an importer of paper. The exports have increased by 305,140 pounds, and the decrease of imports is one of 96,140 pounds. The trend of both the export and the import trade is consistent, while the sources of supply of the raw materials and of the kinds of paper not manufactured in the district remain the same.

REIMS.

From Consul William Bardel.

Statistics of paper exports at large are not obtainable here. The only kind of paper exported to the United States from this district is the cigarette paper, and this export never amounted during the last five years to more than $5,000.

What little imported paper reaches this district does not come here directly, but nearly all of it is furnished by agencies or commission houses at Paris; statistics for the district, therefore, can not be given. There seems to exist a demand for strong packing paper, such as the kraft. There would also seem to be a prospect for the introduction of American writing and book paper. The paper used here generally for these purposes is inferior in quality to the paper furnished this office by the American Government. Much depends, of course, on the prices American manufacturers can make. A large impediment to the introduction of American paper exists in the customs duty imposed by the French Government on American paper. Even at the rate accorded American paper by the treaty of 1910, the duty on the American product is higher than the minimum rate accorded the products of nearly all other countries supplying this country, and for a certain class of American paper this tariff seems to be absolutely prohibitive.

The terms generally granted in the sale of paper in this country are either 60 or 90 days net, or, if paid within 30 days, subject to a discount of 2 per cent.

MARKET FOR PAPER OF ALL CLASSES.

Paper of all kinds and in all its specialties is used in this consular district. The source of the greatest part of the paper used here is France. While writing, book, and news paper employed in this district is produced in other parts of France, the wrapping and packing paper used come from factories established in the Department of Vosges, in the eastern part of this consular district, which factories also supply an important percentage of all such paper used in other parts of this country. With the exception of some fancy correspondence paper, packed in boxes containing 500 sheets each, little American paper is used here as yet, but, under certain conditions, might find a market in this district. Especially should this be the case with strong wrapping paper. There has lately been introduced a certain paper called "kraft" paper, made in Norway, which is said to surpass in tenacity many of the French packing papers, and is sold at reasonable figures. Similar paper, if it can be produced in the United States at competitive prices, would undoubtedly find a ready market here.

Bisulphite, thin-threaded, tissue, parchmented, and cellulose are the papers used the most in this district. The amount of each kind used can not be given.

The sizes of paper produced in this country are of a great variety. The sizes of writing paper most in demand are 8½ by 12½ inches in reams of 500 sheets, which weigh 3¼ pounds; 5½ by 8½ inches, of which the ream weighs 2 pounds. The size of paper most commonly used for printed books of good quality, medium weight, and fine finish is 22 by 36 inches. That for books for commercial purposes of high quality, medium weight, and good finish is 12½ by 35 inches.

News paper, generally of medium or low quality and finish, measures 32 by 44 inches. A ream of double sheets of this weighs about 28 pounds. Bisulphite wrapping paper, the one most in use, is of medium quality and finish, and its average weight is from 3½ to 4 ounces per square yard. The standard size of this paper generally is 25½ by 39 inches, but very often this paper comes on reels, measuring in width between 23½ and 63 inches and weighing on an average of 110 to 130 pounds. From these reels the sizes desired are cut. The sizes of 25½ by 39, 27½ by 39, and 31½ by 39 inches are generally used by the department and dry goods stores. For textile fabrics sizes of 27½ by 39, 31½ by 48, 39 by 55, and 44 by 60 inches are frequently used. Wall paper, some of which is manufactured in this consular district and a small quantity of which is sold also to the United States, comes in rolls holding each about 26 feet of paper of a width of 17 inches. Tissue paper comes in reams of 500 sheets and measures about 14 by 20 inches. Blotting paper, generally of very poor quality, comes in whole sheets of 18 by 24 inches. Carbon paper is made in sheets of 12 by 18 and of 12 by 15 inches. Strawboard used in this district is generally very common and measures from 12 by 20 to 40 by 65 inches.

The raw materials available for paper manufacturers are wood pulp, costing from 91 cents to $1.60 per 100 pounds; bisulphite pulp, costing from $2 to $2.61 for 100 pounds; old journals, paper, etc., cost from 35 cents to 52 cents per 100 pounds; rags, according to their quality, vary considerably in price, and cost from 87 cents to $3.50 per 100 pounds.

PRODUCTION OF LOCAL MILLS.

There are about 25 paper mills in this consular district. It is difficult to receive correct information regarding their output, but it is safe to say that the total of their sales does not fall below $3,000,000 per annum. The wages for efficient labor paid by these mills range between 80 cents and $1.20 a day of 10 hours.

The average wholesale prices paid for 100 pounds of the most important local products are as follows: For writing paper, $4.35; ledger and linen paper, $5.22; book paper, $4.90; news paper, from $2.50 to $3.15; wrapping paper, first quality, $3.55, second quality, $3.05; tissue paper, $5; blotting paper, $5.50; strawboard, $1.56.

The only imported paper which sells in this district in commercial quantities is the kraft paper, which is sold for from $3.90 to $4.35 for 100 pounds.

For the reasons given in many reports made on conditions in this consular district, there is no probability that American exporters of paper will ever be able to do a direct business with any of the merchants in this district, and a market for American paper can only be reached by the intermediary of agents in large commercial centers; no names can therefore be given of persons or firms who might become agents for American exporters, but this office can recommend a firm that would doubtless prove a very efficient subagent to a general agent at Paris or elsewhere. This firm not only has a well-established business here, but is doing business with the merchants in the largest part of this district, and is quite ready to undertake the sale of the American product when once it is introduced into this country.

Large users of paper, considering conditions existing in this district, are the large grocery and general store associations, the department stores, the textile manufacturers and merchants, the newspaper and printing offices, the champagne houses, etc.; but, for the same reasons, not one of these concerns is likely ever to import paper directly from the United States.

ROUEN.

From Consul L. Memminger.

American paper is known to specialists here and its qualities are esteemed, but it does not enter generally into the market. It is not handled by the three principal wholesale dealers of Rouen, who supply practically all the retail dealers and consumers of the district, which comprises the arrondissements of Rouen, Dieppe, and Neufchatel in the Department of Seine-Inferieure, and the Departments of Eure and Somme. Opportunity for the sale of American paper locally would appear to be largely dependent upon the price at which it could be offered in competition with paper of French manufacture. It will be noted that the imports are only of high-grade writing paper, and this, it is stated by those familiar with the trade, is because the French customs duty is assessed on the basis of weight and not of quality.

The trend of the import trade has varied very little in recent years, as the figures indicate approximately the same amount of imports each year.

There are British and Belgian steamships plying directly with this port, but none from the United States. The port of Havre, which has direct steamship connections with the United States, is, however, only 70 miles distant from Rouen and has convenient connections by barge service and small steamers with this port.

The import trade in paper is naturally influenced to a considerable extent by the French customs tariff, which imposes a duty of 10 francs ($1.93) per 100 kilos (220.46 pounds) on plain papers and 15 francs ($2.89) on "papiers faconnes" (cut and shaped paper). As this is assessed on the basis of weight and not of quality, there would appear to be more advantage for the sale locally of high-grade imported paper than of low-grade imported paper.

Prices in the local market are quoted per 100 kilos (220.46 pounds) and terms of payment are 30 days with 1 per cent discount, or 90 days net.

ST. ETIENNE.

From Consul William H. Hunt.

The special factors which have an influence on the import paper trade between France and America, in addition to those of transportation rates and customs duties, are whether American manufacturers can compete successfully with the prices of French paper makers. Competent authorities seem to think it impossible for American-made paper to find a market in France for this reason, and moreover, because Germany, and particularly Sweden and Norway, which are admirably well placed, have not been able to make any headway in the French paper market.

The constantly increasing consumption of paper of all classes, and the rise in the price of rags, lead me to venture the suggestion that there is perhaps a good market in France for American wood pulp, which is at present imported in large quantities from Canada in competition with similar products from Sweden and Norway. Such raw materials are subject to a customs duty of only 19 to 38 cents per 220 pounds, according to quality.

GERMANY.

BERLIN.

From Consul General R. P. Skinner.

The output of paper in Germany is exceeded in volume by that in no other country except the United States. In the lines which make up the great bulk of the paper business there is little or no market for foreign goods. For specialties of foreign origin, on the other hand, there is always a demand. The consumption of paper in Germany is said to be higher per capita than in any other country.

The German paper-making industry, which is among the four or five most important industries which the Empire supports, is amply supplied with raw materials. Germany and its neighbors, France, Belgium, and Holland are among the world's greatest sources of rags, and Germany is the leading purveyor of rags to the paper makers of the United States. So far as German forests do not provide cellulose, it is purchased from mills run largely by German capital among the forests of Austria-Hungary, Finland, and Scandinavia. In 1913 Germany imported $2,129,000 worth of chemically prepared wood pulp, and $86,000 of mechanically prepared pulp. Of the 51,320 metric tons of chemical pulp imported 26,000 tons came from Sweden, 2,500 from Norway, 12,700 from Austria-Hungary, and 7,185 from Finland. In the matter of cellulose the situation of the German paper makers is not disadvantageous as compared with that of their American competitors. As for rags, they are distinctly better off.

CENTERS OF PAPER MAKING.

The great paper-consuming centers of Germany are Leipzig and Berlin, and for export, Hamburg. The location of mills turning out print paper and similar bulky lines is determined primarily by facilities for transport to these centers, especially water transport. Owing to its predominant size, Prussia leads in paper production, but Saxony's output is more than four times as great per head of population. Chemnitz and Dresden are centers. In Prussia the Bitterfeld-Halle district near the Saxon border, Rhenish-Westphalia, and Silesia are important paper-producing areas. The industry is also a large one in Bavaria and Baden. Production in the consular district of Berlin (Province of Brandenburg) is comparatively unimportant, although there is a considerable output of paper board. The Elberfelder Papierfabrik A. G., of Elberfeld, has a factory at Zehlendorf, near Berlin, in which about 400 hands are employed. It turns out book and letter paper and stock for filing cards and the like. It is said to have proved unsuccessful financially. There is another factory at Wolfswinkel near Eberswalde in this district (Markgraff & Engel), which derives most of its business from selling print paper to the Reichsdruckerei (Imperial Printing Office). The production of paper in and about Berlin is otherwise unimportant.

YEARLY OUTPUT.

Statistics of paper and paper board production in Germany recently published by the Verein Deutscher Papierfabrikanten (Association of German Paper Manufacturers) are based on returns from all the factories in the Empire, except about 100, for which estimates had to be made, and may be considered reasonably accurate. These statistics are reproduced in the three following tabular statements:

Articles and years.	Quantity.	Value.	Articles and years.	Quantity.	Value.
PAPER.	*Metric tons.*		PAPER AND PAPER BOARD TOGETHER.		
1910	1,436,509	$99,093,276		*Metric tons.*	
1911	1,500,445	102,167,053	1909	1,509,170	$98,706,912
1912	1,611,241	109,571,373	1910	1,790,785	112,471,379
PAPER BOARD.			1911	1,843,813	115,135,242
1910	354,276	13,378,103	1912	1,980,753	123,891,363
1911	343,368	12,968,189			
1912	369,512	14,319,990			

The consumption of paper and paper board per head of population (imports added and exports subtracted) is shown as follows:

Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Pounds.			*Pounds.*	
1909	52.0	$1.54	1911	55.4	$1.57
1910	54.6	1.53	1912	60.2	1.71

The following table shows the production of paper and paper board, by States and Provinces, in 1912:

States and Provinces.	Paper.		Paper board.	
	Quantity.	Value.	Quantity.	Value.
Prussia:	*Metric tons.*		*Metric tons.*	
Rhineland	201,606	$16,483,123	32,536	$1,225,390
Silesia	200,932	11,667,533	45,247	1,958,697
Saxony	106,294	6,392,331	17,462	706,482
Westphalia	60,446	3,897,741	23,338	708,544
Pomerania	45,875	3,748,495	4,732	199,785
Hanover	38,137	3,713,059	20,624	613,973
Brandenburg	37,524	3,186,080	45,777	1,557,406
Schleswig-Holstein	27,220	1,374,842	1,006	42,510
Hesse-Nassau	11,763	1,129,648	910	71,384
East and West Prussia	3,329	220,935	4,720	170,765
Total Prussia	733,126	51,763,787	196,352	7,314,936
Saxony	422,793	25,422,012	96,073	4,050,842
Bavaria	156,121	10,348,816	22,261	874,983
Baden	106,805	7,438,916	12,906	514,951
Wurttemberg and Hohenzollernland	52,342	4,841,238	5,995	203,180
Hesse	36,015	2,496,400	5,590	215,166
Alsace-Lorraine	18,296	1,616,604	4,616	195,778
Thuringian States	67,016	4,435,344	14,928	634,086
Other States	18,727	1,208,256	10,791	316,119
Total all States	1,611,241	109,571,373	369,512	14,319,991

As will be seen, 1,611,241 metric tons of paper were produced in 1912, valued at $109,571,373, and 369,512 tons of paper board, valued at $14,319,990. The combined value of $123,891,363 represents an increase of 7.6 per cent over the figure for 1911, of 10.1 per cent as compared with 1910, and 25.5 per cent as compared with 1909. In the opinion of the trade overproduction prevails, and the last few years are spoken of as a period of falling prices. By dividing the value of the paper output in 1912 by its volume an average value of slightly more than 3 cents a pound is obtained. For paper board the average is about 1.7 cents a pound. These figures are not lower than those recorded for 1910 and 1911. The apparent conflict between these results and the statement that paper prices are tending downward is explained on the ground that the production of high grades of paper is increasing faster than that of the cheaper lines. This is said to be especially true in the case of wrapping paper, better grades of which are in increasing demand for putting up packages of merchandise, particularly foodstuffs.

LABOR AND EQUIPMENT.

While certain skilled labor is highly paid in German paper mills, the general run of hands are obtained very cheaply. Supplementing the official data as to wages given in the report from Hamburg, it may be said that untrained workmen are obtainable at from 3 to 3.50 and 4 marks (71 to 83 and 95 cents) a day. The wages of girl laborers rarely exceed 3 marks (71 cents) a day, while the younger female hands receive from 12 to 15 marks ($2.86 to $3.57) a week.

The equipment of German paper mills is purchased mostly of domestic manufacturers, who do a large export business as well. The

United States participates to a considerable extent, however, in what importations are made. These amounted in 1913 to 137 machines for the manufacture of cellulose and paper, worth $38,000, and 657 machines for bookbinding and the making of carton and paper goods, worth $190,000. Of the 202 metric tons of machines of the first kind imported the United States supplied 6 and Norway 17; of the 247 tons of machines of the second kind imported the United States supplied 60 and Great Britain 42.

Germany's exports of machinery of the two kinds mentioned totaled 10,668 tons (1,524 pieces), worth $2,133,000, and 6,189 tons (34,350 pieces), worth $2,807,000, respectively, in 1913. The chief markets for cellulose and paper-making machinery were Russia (2,357 tons), Italy (1,417), Netherlands (990), Finland (949), and Norway (842). Considerable shipments were also made to Brazil, Argentina, and the United States (72 tons to the last named). The chief markets for bookbinding, box making, and similar machinery were Russia (896 tons), Austria-Hungary (720), Great Britain (694), France (544), and Italy (459). Over-sea shipments were to Brazil, Argentina, and the United States (70 tons).

LOW PRICES FOR HOME PRODUCTS.

The German paper market is filled to overflowing with domestic products. Competition in standard lines is very acute. This situation, coupled with ample raw material supplies and an abundance of cheap labor, brings prices for the domestic goods often far below those which foreign, especially American, manufacturers must ask. In the case of American specialties, imitated in Germany, the price for the German substitute is not infrequently one-half and sometimes one-third that of the American original.

LARGE VOLUME OF EXPORTS.

Germany exported during 1913 more than a million dollars' worth each of 16 different classes of paper and paper goods. These are listed below in the order of their importance with the chief countries of destination, also in order of importance, noted in each case.

1. Chemical wood pulp (valued at $8,386,200) to France, United Kingdom, United States, Italy, Belgium, Netherlands, and Spain.
2. Packing paper ($6,289,400) to United Kingdom, Belgium, Netherlands, Cuba, United States, British India, and Switzerland.
3. Print paper ($4,674,800) to United Kingdom, Argentina, Netherlands, Brazil, Japan, Chile, and British India.
4. Visiting and business cards ($4,046,700) to United Kingdom, United States, Austria-Hungary, Netherlands, Switzerland, Belgium, and Russia.
5. Colored paper ($3,851,600) to United Kingdom, Argentina, Japan, United States, Austria-Hungary, Belgium, Australia, Switzerland, Netherlands, and Brazil.
6. Printed post cards ($3,686,600) to United Kingdom, Austria-Hungary, United States, Russia, Switzerland, Netherlands, Italy, Belgium, and Sweden.
7. Letter paper ($2,877,700) to Netherlands, Brazil, Belgium, United Kingdom, Switzerland, Argentina, Turkey, and Denmark.
8. Wall paper ($2,180,300) to Netherlands, United Kingdom, United States, Belgium, Switzerland, and France.
9. Carton paper ($2,023,200) to United Kingdom, France, Netherlands, Belgium, Switzerland, and the United States.

10. Paper covered paper goods ($2,003,100) to United States, United Kingdom, Belgium, France, Austria-Hungary, Switzerland, and Argentina.

11. Copy books, price lists, etc. ($1,897,600), to Netherlands, Austria-Hungary, United Kingdom, Belgium, Switzerland, Argentina, United States, and France.

12. Unsensitized photographic paper ($1,657,900) to United States, Belgium, and the United Kingdom.

13. Ornamented paper and board ($1,628,900) to United Kingdom, United States, Netherlands, Austria-Hungary, Belgium, and Switzerland.

14. Coarse board ($1,414,500) to United Kingdom, Netherlands, Argentina, Denmark, Sweden, Belgium, and British India.

15. Sensitized photographic paper ($1,326,400) to United Kingdom, Russia, Austria-Hungary, Switzerland, and Belgium.

16. Envelopes ($1,086,500) to Netherlands, United Kingdom, Belgium, Argentina, Turkey, Brazil, and Sweden.

The following table shows the amounts and values of all classes of paper and paper manufactures exported in 1912 and 1913. The figures for 1913 are provisional and liable to subsequent correction:

Articles.	1912		1913	
	Quantity.	Value.	Quantity.	Value.
	Metric tons.		*Metric tons.*	
Textile pulp	1,412	$217,300	1,193	$191,100
Mechanical wood pulp	6,933	176,600	7,507	155,400
Chemical wood pulp	175,762	7,695,700	179,463	8,386,200
Vulcanized fiber	93	41,900	90	47,800
Glazed board	1,412	212,300	2,004	324,900
Coarse board	22,244	1,110,700	29,291	1,414,500
Other paper board	3,250	347,000	4,422	449,600
Roofing paper	10,881	475,700	10,452	563,800
Packing paper of all kinds	77,766	6,066,100	84,863	6,289,400
Print paper	55,227	3,776,800	68,749	4,674,800
Carton paper	12,728	1,822,100	13,905	2,023,200
Blotting paper	868	249,900	836	251,600
Parchment	4,132	604,000	5,167	758,500
Letter paper	16,179	2,698,700	18,064	2,877,700
Letter paper, in boxes	805	424,400	981	484,100
Drawing paper	2,022	517,200	2,114	516,200
Tissue paper	4,427	798,300	4,504	857,300
Unsensitized photographic paper	10,261	1,506,000	11,612	1,657,900
Sensitized photographic paper	1,270	1,109,600	1,541	1,326,400
Colored paper	18,081	3,184,000	23,200	3,851,600
Lacquered paper	675	515,300	798	620,500
Printed post cards	3,487	3,302,000	3,795	3,686,600
Visiting and business cards	4,616	3,192,000	5,876	4,046,700
Cardboard for tickets	657	394,100	508	268,700
Ornamented paper and board	1,724	1,012,000	2,691	1,628,900
Covered with textiles	619	188,700	698	230,600
Wall paper	12,653	2,257,200	11,972	2,180,300
Playing cards	133	101,400	145	104,200
Abrasive paper	2,459	312,500	2,412	306,100
Tracing paper, etc	1,619	766,600	1,956	887,700
Paper bags, etc	2,038	534,500	2,473	644,500
Envelopes	3,985	921,800	4,680	1,086,500
Paper underwear	1,227	762,800	1,181	715,600
Account books	1,442	551,200	1,696	641,900
Portfolios, dossiers, etc	544	1,294,200	507	380,300
Albums	829	266,300	965	341,500
Paper-covered paper goods	4,296	1,545,600	5,372	2,003,100
Metal-covered and painted goods	132	85,000	95	68,100
Hard-paper goods	1,886	654,800	1,979	698,800
Lamp shades, etc	812	410,300	2,049	704,200
Copy books, price lists, etc	6,647	1,851,200	7,949	1,897,600
Combined with textiles; paper embroidery	496	369,400	628	525,700
Cigar holders, etc	1,430	581,200	1,439	606,700
Paper waste	9,761	165,900	10,276	156,600
Canceled postage stamps	26	351,300	18	459,100
Miscellaneous	1,525	671,200	1,006	525,100

IMPORTATIONS ONE-NINTH OF EXPORTATIONS.

The total value of Germany's importations of paper and paper manufactures in 1913 was $7,460,300; in 1912, $7,240,500—compared with exportations during the same periods valued at $62,518,500 and $55,266,000, respectively. The predominant article of importation is a semiraw material—chemically prepared wood pulp—which accounted for more than $2,000,000 in 1913. The next most important article is a special product used for further manufacture, namely, vulcanized fiber, while paper shavings, old paper, etc., come third. Fully manufactured articles imported in values exceeding $100,000 in 1913 were coarse cardboard, packing paper, tissue paper, visiting and business cards, letter paper, printed post cards, ornamented paper and board, wall paper, sensitized photographic paper, tracing paper, blue paper, etc., and copy books and price lists.

An examination of the sources of these importations shows that the trade is almost altogether intra-European, and in a great measure limited to immediately contiguous territory. Sources of raw materials have already been noted. Only one is brought in quantity from overseas; that is, vulcanized fiber, which comes principally from the United States. As to manufactured products Austria-Hungary appears importantly in connection with every one except wall paper, sensitized photographic paper, tracing paper, and copy books. Finland is a large purveyor of coarse board. Sweden and Norway supply packing paper. France is an important source of tissue paper, letter paper, visiting cards, wall paper, and copy books. Switzerland ranks next to Austria-Hungary in supplying post cards and appears prominently also in connection with visiting cards. The Netherlands supply large quantities of letter paper; Belgium, sensitized photographic paper; and the United Kingdom, ornamented paper and board, wall paper, tracing paper, and copy books.

The following table shows the amounts and values of the various classes of paper and paper manufactures imported from all countries in the calendar years 1912 and 1913. As in the case of exports, the figures for 1913 are provisional.

Articles.	1912		1913	
	Quantity.	Value.	Quantity.	Value.
	Metric tons.		*Metric tons.*	
Textile pulp	72	$9,520	69	$9,000
Mechanical wood pulp	8,310	197,800	3,622	86,000
Chemical wood pulp	48,700	2,020,000	51,320	2,129,000
Vulcanized fiber	1,012	481,950	1,549	737,600
Glazed board	150	23,300	287	44,500
Coarse board	16,554	571,200	13,494	465,000
Other paper board	37	4,500	25	2,800
Roofing paper	1,738	72,350	1,960	81,600
Yellow straw paper	24	700	2	....
Packing paper dyed in the pulp	1,967	117,000	2,328	138,500
Other packing paper	4,131	304,900	4,570	337,200
Print paper	990	82,600	1,032	85,900
Carton paper	69	10,700	61	9,500
Blotting paper	352	92,300	307	80,000
Parchment	790	116,600	612	90,400
Letter paper	460	100,900	496	108,500
Letter paper in boxes	316	127,600	333	134,700

Articles.	1912		1913	
	Quantity.	Value.	Quantity.	Value.
	Metric tons.		*Metric tons.*	
Drawing paper	246	$87,800	181	$64,500
Tissue paper	1,765	236,000	1,732	229,900
Unsensitized photographic paper	261	52,300	516	98,300
Sensitized photographic paper	96	228,000	72	170,400
Colored and lacquered paper, etc	126	36,000	125	35,700
Printed post cards	148	123,000	199	165,900
Visiting and business cards	563	402,000	634	452,700
Cardboard for tickets	192	91,400	183	87,100
Ornamented paper and board	203	106,800	205	110,000
Covered with textiles	4	1,190	5	1,900
Wall paper	402	128,300	414	132,000
Playing cards	9	6,500	10	6,900
Abrasive paper	413	59,000	338	48,300
Tracing paper, etc	239	114,000	299	142,600
Paper bags, etc	100	23,800	119	28,300
Envelopes	49	11,700	48	11,400
Paper underwear	0.4	240	1.9	1,190
Account books	43	15,700	44	16,000
Portfolios, dossiers, etc	38	17,100	39	17,600
Albums	5	1,600	4	1,600
Paper-covered paper goods	209	74,500	192	68,500
Metal-covered and painted goods	13	6,500	20	9,500
Hard paper goods	39	14,000	38	13,600
Lamp shades, etc	13	6,000	13	6,200
Copy books, price lists, etc	696	165,600	761	181,100
Combined with textiles; paper embroidery	45	32,300	47	33,300
Cigar holders, etc	131	54,500	108	45,200
Paper waste	25,809	614,300	24,275	577,600
Canceled postage stamps	39	93,000	26	61,900

IMPORTATIONS FROM THE UNITED STATES.

The yearly average value of paper and paper manufactures imported into Germany from the United States during the period 1908 to 1912 was $617,000, while that of similar imports into the United States from Germany was $6,745,000, or somewhat more than ten times as much. In 1912, the latest year for which statistics are available, the figures were, respectively, $714,500 and $6,140,400. The main items making up the American importations into Germany in 1910, 1911, and 1912 are as follows:

Articles.	1910	1911	1912
Chemical wood pulp	$42,600	$47,400	$43,300
Vulcanized fiber	343,000	487,700	439,800
Glazed cardboard	500	1,200	500
Coarse cardboard	17,400	5,700	1,500
Roofing paper	2,700	7,400	24,300
Packing paper dyed in the pulp	4,300	1,700	....
Glazed packing paper	10,000	4,000	2,900
Blotting paper	16,000	11,000	15,000
Tissue paper			2,700
Letter paper	700	500	1,200
Unsensitized photographic paper	700	1,000	5,500
Sensitized photographic paper	5,200	5,500	9,300
Colored and lacquered paper	3,600	3,600	2,400
Printed post cards	7,400	4,500	4,800
Visiting and business cards	30,700	35,200	30,700
Cardboard for tickets			5,000
Ornamented paper and board	$14,300	$9,500	$11,500
Wall paper	3,300	6,900	4,800
Playing cards	4,000	4,300	4,300
Abrasive papers	33,600	34,300	45,900
Tracing paper, etc	15,700	16,700	13,300
Paper bags, etc	6,400	5,200	6,900
Paper-covered paper goods	16,900	15,200	10,000
Hard paper goods	700	1,400	1,400
Copy books, price lists, etc	22,400	24,000	21,700
Combined with textiles; paper embroidery, etc	1,000	1,400	1,200
Cigar holders, etc	500	2,400	250

The above figures show that the present sale of American paper and paper goods in Germany, aside from the semiraw materials, chemical wood pulp, and vulcanized fiber, is practically limited to what has been classified by the German customs authorities under the headings given in the following table. This table contrasts German sales in America with American sales in Germany for 1912 of the few paper lines in which the United States does a considerable business in Germany.

Articles.	American exports to Germany.	German exports to United States.	Articles.	American exports to Germany.	German exports to United States.
Visiting and business cards and labels	$30,700	$529,000	Bags, folding boxes, etc	$6,900	$45,700
Ornamented paper and board.	11,500	179,700	Copy books, price lists, etc	21,700	114,000
Blotting paper	15,000	46,400	Paper-covered paper goods	10,000	305,800
Photographic paper, sensitized	9,300	15,900	Printed post cards	4.800	507,900
Photographic paper, unsensitized	5,500	493,100	Roofing paper	24,300	250
Tracing paper, etc	13,300	91,200	Wall paper	4,800	253,900
			Abrasive papers	45.900	1,200
			Playing cards	4,300	1,000

BLOTTING AND PHOTOGRAPHIC PAPER.

American blotting paper is sold in Germany, as elsewhere in Europe, by reason of its superior quality. Competition on the part of German and Austrian manufacturers becomes more and more successful each year, and sales of the American product are maintained largely by the reputation of certain American marks. While the present market is not susceptible of any great expansion, it will probably always be possible to dispose of small quantities of high-priced blotting paper in Germany.

German importations of American photographic paper, both sensitized and unsensitized, are not yet very large, but there has been a steady increase in the last five years. The cheaper qualities are supplied to the German market principally by three firms, of which two are German and one Dutch. Importations from America are almost altogether of expensive papers used to obtain special finishes.

The German customs duty of 10 marks ($2.38) per 100 kilos (220.46 pounds) is no hindrance to this high-class trade. Freights, if nothing else, would probably prevent the development of business in cheap paper. A large American photographic supply house manufactures in England most of the paper it sells in Germany. Credit terms in the photographic paper trade are unusually short, 30 days being the rule, although certain domestic manufacturers who are endeavoring to deal directly with the retailers are being forced into more liberal arrangements.

GENERAL MARKET LIMITED TO SPECIALTIES.

As in the case of photographic paper, the market in Germany for American paper and paper goods in general appears to be strictly limited to specialties and novelties in the sale of which price is a secondary factor. In standard lines such as news print, book print, letter paper, etc., where competition is almost solely a matter of price, the German market is an unpromising field. Some American bond paper may be sold here, but this and the high-grade letter paper business have been traditionally in English hands. Until recently German manufacturers have made marked improvements in their products and have at the same time been so far able to undersell English producers that the import business has dwindled to comparative insignificance. German manufacturers have put on the market at 90 pfennigs a kilo (9.7 cents a pound) letter paper sufficiently approaching in quality similar English paper priced 1.60 marks (17.3 cents a pound) to largely replace the latter.

While the opportunities for the sale of American paper and paper goods are few, in certain lines these goods enjoy a reputation which places them quite apart from anything else in the market. A notable example is cover paper. When the desire for a color or a design or a quality in catalogue covers, for instance, such as will catch the eye, is sufficiently strong to outweigh considerations of price an American paper will generally be chosen. Similarly, ornamented and embossed paper board, such as is used in making up calendars and the like, is purchased in small but more or less constant quantities from the United States. Even such distinctively German wares as fancy paper bags and folding boxes, paper-covered paper goods, and labels appear among the American imports, and American printed post cards, mostly bearing pictures of Gibson girls, are sold here yearly to the value of a few thousand dollars. Wherever originality is an essential feature there is an opportunity to sell American products.

What the German manufacturer lacks in originality he partly makes up in ability to reproduce at a lower cost. Successful American cover designs are at once copied. The reproductions, said usually to be almost as good as the originals, are sold not infrequently at one-half and even one-third the price. However, as the prime factor in the sale of American goods is their novelty, imitation, though prompt, is not a serious handicap. Sales can in any case be supported only by an unintermittent flow of new ideas.

CREDIT TERMS AND CUSTOMS DUTIES.

Credit terms in the paper trade are generally long, running up to 13 months. This is a situation with which American exporters need not particularly concern themselves. Any reasonable terms will be acceptable to such wholesalers as it would be well to do business with. Neither does the German customs tariff present any special hindrances. The duties are in the main inconsiderable with reference to the high unit value of the goods usually imported from the United States.

MARKET FOR AMERICAN WALL PAPER.

American wall paper is sold in Germany to a considerable extent, again by reason of the originality of the designs offered. There are 4 wall-paper factories in and about Berlin and about 60 throughout the Empire. Overproduction is said to prevail, and the existing slump in building adds to the depression in the market. Yet in 1912 some

$5,000 worth of American wall paper was imported directly and probably a good deal more came through London. The American product can not compete at all on the basis of price. Taste and distinctiveness in design are the only selling points. The chief hindrance to increased business at present is the absence of American stocks on this side of the ocean. Successful designs are soon exhausted and can not be replenished promptly enough. One American firm doing some business in Germany carries stock in London. This does almost as well as having stock in Germany.

The German wall-paper mills open their selling season in June. The English, who are the chief foreign competitors, bring their samples out in August. The dealers usually have their stocks in by the first of the year. The rule is for the manufacturers to invoice goods as of March 1, and allow six months' credit after that date.

The German market for American wall papers, being limited to expensive lines, will never be large. In the main it can probably best be handled from London. Duty is a negligible factor.

ROOFING AND ABRASIVE PAPERS.

As will be seen from the preceding table, the only other lines in which the United States does a considerable business with Germany are roofing and abrasive papers. Imports of the latter amounted to nearly $46,000 in 1912 against negligible sales of German papers in the United States. This is due to the marked superiority of the American product. American sandpaper does not compete in the cheaper lines such as are used for handwork, the prices for the German product being about 80 per cent less. For machine work, however, the high quality American garnet paper is often indispensable, and it sells in considerable quantities despite a price difference of about 30 per cent compared with similar German lines. The superiority of the American article is due first to the paper used, a tough manila, which German manufacturers have so far been unable to duplicate. The American mineral and glue are likewise better. American emery paper is also superior to the German, but sales of this to the metal-working trades have never been as large as those of sandpaper for woodworking machines. The latter market holds out the greater possibilities.

SALES METHODS FOR ABRASIVE PAPERS.

The German trade in abrasive papers is mostly direct from maker to consumer. The American brand which has so far proved most successful is marketed through a branch office in Berlin, but the overhead expenses have proved too heavy, and this system will probably soon be abandoned for direct dealing with provincial jobbing agents. Another make of American paper is being handled by a large German firm in Berlin which has the agencies for many kinds of American metal and woodworking machinery.

Aside from considerations of price, the chief deterrents to the development of American trade in abrasive papers are ocean freights, said to be very high in this case, and the insistence of German buyers on prices f. o. b. points in Germany as opposed to a disposition on the part of American manufacturers to quote prices f. o. b. New York. The German import duty on emery paper of 1 mark ($0.238) per 100 kilos (220.46 pounds) is negligible, but paper cloth, or what are known as combination goods, must pay a duty of 50 marks ($11.90) per 100 kilos (No. 521 of the tariff), and on sandpaper in rolls less than 8 inches in width a duty of 15 marks ($3.57) per 100 kilos (No. 670 of the tariff) is assessed. These latter rates are said to be prohibitive.

American roofing papers are sold in Germany, owing to their superior quality. The general situation is outlined in Daily Consular and Trade Reports for September 18, 1912, page 1426.

PRINT PAPER IN GERMANY.

Germany produces news printing paper in large quantities, and exports under this head amounted to 55,179 tons in 1912, against 62,669 tons in 1911. Much of this was packed in rolls for use on perfecting presses. Shipments to the United States under this German tariff number amounted to 438 tons in 1912, but probably none of it was in rolls. Practically the whole German production of news print paper is sold by the Verband Deutscher Druck-papier-Fabriken, an organization maintained by the manufacturers. This organization has not yet been able to enter the American market. A prominent local publisher states that paper such as he uses weighs 0.15075 ounce per square foot, and comes in rolls weighing from 330 to 990 pounds. The prevailing German price is 22½ pfennigs per kilo, equal to $0.0243 per pound. Competition from Scandinavia no doubt has some effect upon prices. A Hamburg agent of various important manufacturers in Sweden states that he can quote news print paper in rolls at £9 ($43.80) per ton of 2,240 pounds f. o. b. Goteborg or Christiania, this price being equal to $0.01955 per pound.

[In addition to the statistics furnished by Consul General Skinner, it is deemed best to include the export statistics of Germany for 1912, set forth by the British Board of Trade in a pamphlet issued in November, 1914, entitled "Competition with Germany and Austria-Hungary in Neutral Markets: No. 90—Paper, Pasteboard, and Cardboard." The figures follow.]

Country to which exported.	Glazed board (pressing board) and other highly glazed pasteboard, imitation leather board, and other fine pasteboard.	Vulcanized fiber.	Pasteboard of wood pulp (imitation leather board), straw board, wrapper board, peat board, and other coarse pasteboard, not otherwise mentioned.	Pasteboard impregnated with asphalt, etc., for roofing, also tubes thereof; carton-pierre; ship felt for calking.	Pasteboard of all kinds coated with white or colors with paper pasted on, varnished, bronzed, coated with wool flocks, etc., with impressed patterns (Lignomur), etc.; painters' boards.
United Kingdom	$41,851	$5,353	$317,782	$14,599	$90,516
Austria-Hungary	32,605	6,569	72,024	43,068	7,786
Other markets:					
British India	486		25,305		4,866
British South Africa	1,459		4,136		5,353
Canada	973		2,189		1,216
Australia	2,189		24,332	2,189	15,086
New Zealand	243		729		729
Norway	4,379	243	10,219	83,217	11,679
Sweden	8,759	973	84,677	34,552	2,919
Denmark	6,813	486	127,502	21,412	11,192
Netherlands	7,786	1,216	109,496	70,077	33,092
Belgium	9,733	1,459	81,757	46,718	18,492
France	13,626	3,893	15,086	57,911	1,216
Switzerland	7,299	5,353	34,065	17,032	7,786
Spain	3,649	729	5,839	5,839	2,676
Portugal	1,459		4,866	729	2,189
Italy	19,952	3,163	12,166	32,188	2,433
Greece	486		243	4,136	1,946
Bulgaria	973		486		4,866
Serbia			729		486
Roumania	1,946	2,433	486	4,379	4,379
Russia	17,519	9,246	22,385	73,484	3,649
Turkey	1,703		5,839	21,899	24,189
Egypt	243		9,733	2,189	5,839
Dutch East Indies			1,946	5,353	3,163
Philippines			486		
China	729	486	4,136	1,946	5,353
Japan	3,893	243	4,379	243	2,189
Brazil	3,649	243	33,578	1,703	24,332
Uruguay			2,676		973
Argentina	1,703		69,104	8,759	19,466
Chile	1,459		7,786	486	5,839
Peru			1,459		486
Venezuela			1,216	243	243
Ecuador			486		
Colombia			1,459		729
United States	13,626		20,925	243	19,466
Mexico	486		1,946	486	1,703
Cuba			2,433	2,189	243
Total, other markets	137,220	30,166	736,280	499,602	250,463
Total to all destinations	211,676	42,088	1,126,086	557,269	348,765

Country to which exported.	Packing paper of all kinds, including tissue paper weighing more than 30 grams per square meter, and yellow straw paper.	Printing paper, undyed or dyed in the pulp.	Cardboard (thin cardboard) except drawing cardboards.	Parchment paper.	Paper and cardboard, covered with spun material, or with foundation or layers of such or of wire gauze.
United Kingdom	$2,398,697	$684,220	$388,833	$261,331	$31,145
Austria-Hungary	289,556	63,994	123,852	26,522	18,736
Other markets:					
British India	175,194	79,323	2,433	243	973
British South Africa	25.792	11,679	243	3,893	243
Canada	13,626	22,872	2,676	17,032	...
Australia	61,804	76,404	17,032	61,317	1,216
New Zealand	1,216	1,703	486	10,706	...
Norway	24,332	14,599	18,006	13,626	2,433
Sweden	23,845	12,652	36,985	5,353	5,839
Denmark	81,270	17,519	43,798	89,543	2,919
Netherlands	416,085	561,107	175,194	40,391	17,032
Belgium	596,633	121,175	131,395	9,733	21,899
France	212,666	25,792	274,957	2,919	5,839
Switzerland	292,476	194,660	112,902	25,792	19,466
Spain	68,131	19,952	38,932	1,459	3,163
Portugal	13,626	26,765	13,626	1,216	...
Italy	172,274	12,652	86,137	5,353	7,786
Greece	17,032	15,086	2,919	729	973
Bulgaria	3,893	23.845	3,406	...	243
Serbia	60,344	22,385	1,946	243	...
Roumania	5,839	4,136	12,652	486	1,459
Russia	18,492	14,599	40,878	7,786	14,599
Turkey	43,311	23,359	4,379	243	1,216
Egypt	14,599	11,192	2,919	1,216	243
Dutch East Indies	29,685	36,985	7,299	...	1,459
Philippines	13,626	9,733	1,703	...	...
China	38,932	32,605	2,919	729	...
Japan	174,220	121,175	97,330	3,893	486
Brazil	91,490	403,919	51,098	1,703	5,839
Uruguay	17,032	30,172	3,406	1,216	729
Argentina	103,656	847,744	63,264	8,273	11,679
Chile	34,065	12,312	5,353	1,216	1,459
Peru	13,139	40,878	1,216	729	...
Venezuela	13,626	3,649	2,189	...	...
Ecuador	14,599	3,649	729	...	...
Colombia	11,679	12,652	2,433	...	...
United States	379,587	68,617	58,398	7,299	97,330
Mexico	14,599	6,326	8,759	973	729
Cuba	150,374	10,706	5,353	243	243
Total, other markets	3,442,789	2,954,578	1,335,350	325,553	227,494
Total to all destinations	6,131,042	3,702,792	1,848,035	613,406	277,375

Country to which exported.	Wall paper, wall paper borders of paper.	Slate paper and slates thereof, not combined with other materials, smoothing and polishing paper.	Gelatin paper, tracing paper, blue paper, fly paper, moth paper, ozone paper, test (litmus) and other chemical paper, etc.	Tissue paper (except that used for packing).	Crude photographic paper, not treated with baryta; felt paper, and wall paper.
United Kingdom	$352,821	$10,219	$137,235	$229,212	$168,867
Austria-Hungary	95,627	77,864	105,350	90,760	33,578
Other markets:					
British India	5,839	4,866	729	22,872	1,946
British South Africa	22,872	....	1,216	973	486
Canada	10,462	....	8,516	4,136	5,839
Australia	15,086	486	11,192	5,353	12,166
New Zealand	18,492	....	1,459	243	3,649
Norway	8,759	4,866	7,786	10,706	9,733
Sweden	13,626	8,273	12,166	19,466	8,759
Denmark	73,970	8,759	11,679	13,139	18,006
Netherlands	364,987	17,032	40,878	34,065	79,810
Belgium	243,325	18,492	27,739	38,932	476,917
France	202,446	9,246	74,944	41,851	54,018
Switzerland	206,826	17,032	45,258	78,350	22,385
Spain	24,819	10,706	10,706	4,379	6,326
Portugal	2,189	7,786	2,433	4,866	1,703
Italy	80,297	21,412	22,872	22,385	22,385
Greece	243	1,216	7,786	1,216	486
Bulgaria	2,189	973	1,703	243	....
Serbia	243	973	486	243	243
Roumania	4,866	4,866	4,136	4,866	1,459
Russia	45,745	24,332	55,478	15,086	14,599
Turkey	15,086	5,839	2,433	2,189	4,136
Egypt	2,676	1,946	2,433	2,676	2,189
Dutch East Indies	7,299	3,893	3,649	10,706	7,299
Philippines	2,433	1,459	3,893	3,163	1,216
China	2,433	4,866	2,919	4,379	5,839
Japan	3,406	12,166	3,649	1,216	10,706
Brazil	10,219	10,219	21,899	43,798	13,626
Uruguay	7,786	486	1,703	729	486
Argentina	62,777	7,786	19,952	10,706	15,572
Chile	76,404	4,136	7,299	10,219	2,919
Peru	12,166	243	973	1,459	243
Venezuela	2,676	486	486	3,163	729
Ecuador	2,433	....	1,459	486	486
Colombia	8,759	973	1,459	2,676	243
United States	259,384	1,216	92,950	26,765	504,168
Mexico	1,216	1,703	8,273	23,359	15,572
Cuba	486	729	2,189	4,379	486
Total other markets	1,824,920	219,462	526,780	475,378	1,326,830
Total to all destinations	2,273,368	307,545	769,374	795,350	1,529,275

Country to which exported.	Colored paper, including paper coated with chalk, etc., or with metal impressions.	Lacquered paper, paper coated with scales of mica or glass, pounce, wool flock, and the like; paper provided with metallic coatings such as gilt or silver edged paper.	Paper and cardboard punched or stamped out.	Total value of paper, etc.
United Kingdom	$819,518	$95,383	$213,152	$6,258,319
Austria-Hungary	278,850	85,650	88,326	1,248,743
Other markets:				
British India	33,092	18,492	2,433	379,100
British South Africa	5,839	243	1,216	85,650
Canada	10,219	2,919	28,225	130,909
Australia	116,309	7,786	8,750	438,715
New Zealand	3,406		486	43,555
Norway	23,359	1,216	17,032	266,198
Sweden	29,199	2,676	21,899	332,625
Denmark	33,092	3,893	20,439	585,440
Netherlands	113,876	10,706	77,377	2,172,162
Belgium	142,588	13,139	44,285	2,044,417
France	47,691	24,819	22,872	1,091,799
Switzerland	145,995	33,092	46,231	1,312,008
Spain	37,472	7,299	21,412	273,497
Portugal	37,472	729	21,412	143,075
Italy	33,092	25,792	17,032	599,309
Greece	5,353	243	973	61,075
Bulgaria	9,733	243	1,459	54,261
Serbia	3,163		486	91,977
Roumania	15,086	2,433	3,893	79,811
Russia	26,279	9,733	20,925	434,822
Turkey	34,065	729	4,866	196,119
Egypt	17,032	1,703	6,326	85,164
Dutch East Indies	4,866		1,946	125,556
Philippines	4,136	243	25,305	67,888
China	17,032	729	4,379	130,422
Japan	263,764	5,353	7,299	715,619
Brazil	95,870	7,786	34,552	855,531
Uruguay	4,379	243	3,406	75,431
Argentina	329,462	4,379	16,059	1,600,349
Chile	20,439	1,459	4,866	308,536
Peru	11,679	486	486	85,650
Venezuela	243	243	1,459	30,659
Ecuador	1,703	486	2,433	28,956
Colombia	729	973	2,189	46,962
United States	425,332	145,995	183,466	2,217,177
Mexico	9,246	3,649	19,466	118,499
Cuba	30,658	1,459	11,679	224,346
Total other markets	2,142,950	341,368	709,028	17,536,269
Total to all destinations	3,241,318	522,401	1,010,506	25,043,331

CHEMNITZ.

From Vice Consul E. Kilbourne Foote.

The paper supply in this district comes almost entirely from local sources, the mills here producing paper and paper goods of all kinds. In fact, there has been an enormous overproduction, due to the establishing of new factories and the enlarging of old ones. In order to diminish the effect of this overproduction on prices the "Association of German Printing Paper Manufacturers" (Verein Deutscher Druckpapier Fabriken) has resolved to make "rest shifts" in printing paper factories. Orders are assigned to manufacturers of printing paper only by the association, and thus any possibility of a rate war between the factories in this special branch of the industry is done away with.

Exports have fallen off. Reliable statistics of the entire exports from the district are not available, but the values of declared exports from the Chemnitz consular district to the United States during the last six years are as follows:

Years.	Fancy paper.	Printing paper.	Press paper.	Packing paper.	Stationery and fancy boxes.	Wall pockets.	Albums.
1908	$26,290	$5,283	$2,446	$1,084	$1,096	$33,958	$2,887
1909	41,204	3,833	11,173	244	7,870	72,081	7,755
1910	37,081	....	6,343	....	4,097	75,651	6,176
1911	23,361	237	598	....	3,276	115,686	2,344
1912	26,156	303	10,323	284	3,889	127,778	296
1913	32,076	....	6,149	[1] 41,896	9,715	181,507	208

[1] Wall-paper friezes.

DRESDEN.

From Consul General Leo Bergholz.

The natural resources of Saxony make it peculiarly adapted to the manufacture of paper. It is rich in water and wood and has large coal fields, not only in the country itself, but also in Silesia in the east and Bohemia in the south. The Elbe affords cheap transportation, bringing the finished products to Hamburg, Berlin, and the Baltic, and also affords low transfer charges on raw materials from continental and trans-Atlantic sources. An extensive railway system enables the factories that are at some distance from the Elbe to avail themselves, nevertheless, of it. Those in the west of the Kingdom reach the river indirectly, sending their goods from Halle by barges on the Saale to the Elbe, which in turn carries their raw materials to them. To these natural advantages must be added the many branches of industry in the country which are large consumers of paper, particularly the publishing houses with their center in Leipzig, and the powerful Saxon textile trade.

The larger paper factories have seen the necessity of being as independent as possible as regards the raw material in order not to have too great an expenditure when prices are high, and in view of this fact the number of paper factories which, besides their main business, have branches for the manufacture of wood pulp, cellulose, or straw stuff, have steadily increased. Many of the paper factories also manufacture cardboard and cardboard boxes. The number of factories in Saxony with such branch industries is 39, viz, 43.8 per cent of all such works in the country, and 28 of them have wood-pulp factories. Then follow the cardboard factories, which number 13, cellulose with 5, and straw stuff with 4 factories. Eighteen paper factories use the entire output of their wood-pulp factories, and in the same way 3 straw-stuff factories and 1 cellulose factory are run by the paper factory for their own benefit alone. All the other branch factories work for the general trade.

PRODUCTION OF SAXON MILLS.

Every kind of paper and cardboard is manufactured in the Kingdom, as well as all sorts of substitutes for rags. Among others, copper, map, lithographic, note, labels, illustration paper for printing in white and in color, paper for printing newspapers in rolls and sheets, envelope, tablet paper, drawing paper, tissue, copying, typewriting, blotting, and filtering papers, emery paper, paper for telegraphic, etc., purposes; all sorts of wrapping paper from the cheapest kinds to the toughest adansonia papers, covers for documents, imitation handmade paper, box paper, imitation parchment, leather, and cardboard for printing; colored papers; paper for artistic lithography; manila paper, asbestos paper, gray and highest quality bookbinders' cardboard, cardboard for impression in all shapes, all sorts of packing cardboard, cardboard for weaving factories, album cardboard and all sorts of sheen cardboard colored and colored clear through; painted cardboard and artificial leather cloth boxes; all sorts of wood and straw pulp, cellulose, etc.

The market for the largest part of the production of paper is Germany. Very few firms, however, sell their goods entirely within the Empire; most have direct or indirect relations abroad, and from 10 to 30 per cent of the entire production of each Saxon factory reaches some foreign country, particularly paper for printing newspapers.

According to the statistics of the Verein Deutscher Papierfabriken, the entire export for 1909 amounted to 60,213 tons. This amount included newspaper paper in rolls and in sheets. The export statistics do not show the different kinds, but it is estimated that 11½ per cent of such paper reaches foreign countries. After Great Britain, which is the largest purchaser of newspaper paper, taking 12,358 tons in 1909, comes Argentina with 11,751 tons. Then follow in order Japan, Brazil, Netherlands, Chile, British India, and Australia, each of which imports more than 1,100 tons. All other countries take less, among them the United States, with 1,071 tons. In this foreign trade the Kingdom of Saxony has, of course, a large share, above all in the exportation to South America.

It is impossible to secure exact figures, as the export statistics are compiled for the entire Empire without considering the single States, and one is therefore obliged to rely upon estimates. A Saxon factory furnishes paper for one of the largest Argentina newspapers, the Prensa, and also to the Nacion. These newspapers are not only the most important Argentina dailies, but also circulate throughout South and Central America. The United States has attempted to secure the South American market but has not up to the present been very successful.

The superiority of American paper machines has long been recognized in Saxony, and the greatest factory in the country, viz., Kubler & Neithammer, in Kriebstein, near Waldheim, has for many years used American paper machines.

HAMBURG.

From Consul General Henry H. Morgan.

It seems improbable that Hamburg can become an important market for American paper, for the reason that the German paper industry is very diversified and extensive and is at present exporting paper and paper products to all parts of the world, including the United States. German manufacturers have at their disposition an abundance of raw material in the form of wood pulp, rags, etc., and procure labor at a daily wage of from 56 to 72 cents, according to a statement made by a Hamburg exporter one year ago. In 1910, according to statistics supplied by the Imperial Government, labor in 384

German pulp mills included 3,304 skilled laborers and 2,325 unskilled laborers. Wages at that time were being paid in these establishments as follows:

Rates.	Skilled laborers.	Unskilled laborers.
Wages up to 6 cents per hour	....	100
Wages more than 6 cents and up to 8 cents per hour	993	1,802
Wages more than 8 cents and up to 11 cents per hour	1,752	423
Wages more than 11 cents and up to 13 cents per hour	423	....
Wages more than 13 cents and up to 16 cents per hour	136	....
	3,304	2,325

In 1909 Germany produced 1,509,170 tons of paper and pressed board, the estimated value of which was $98,706,928; at that time the consumption of paper per head in the German Empire was 51.98 pounds. It is undoubtedly the case that the industry has increased considerably since then.

German manufacturers are exporting not only completely manufactured paper to the United States, but also cellulose, rags, and partly manufactured paper. There are no important paper manufacturing industries in this consular district, and it is assumed that imperial import and export paper-trade statistics will be included in the report on this subject from Berlin.

Importations into Germany from the United States of paper and paper products are of a special character. Among the most important items is vulcan fiber, a raw material which is not manufactured in Germany and which is used in this country in a variety of industries. The importations from the United States average about 1,000 tons per annum.

Roofing paper also is imported from the United States, these importations having increased from 185 tons in 1911 to 583 tons in 1912. One American concern has built a factory in this country for the production of these roofing materials which has been in operation several years, thus reducing by its existence importations under this head. Nevertheless, actual importations tend to increase.

Chemically prepared fiber from the United States is also imported into Germany, the amount in 1912 having been 868 tons as against 949 tons in 1911.

Polishing papers used in the industries are also an American specialty, and these were imported to the extent of 320 tons in 1912 as against 261 tons in 1911.

Other importations of American paper products are not very considerable. They included, in 1912: Playing cards, 5.9 tons; fly paper, and the like, 28; bags and boxes and the like, 28; books, 170; and paper products, in connection with wood or iron, 28 tons.

HANOVER.

From Consul Albert H. Nicholson.

The leading paper dealers, consumers, and manufacturers of the Hanover consular district are unanimously of the opinion that because of the strength and importance of the German paper industry there is no market in the district for paper of American or foreign origin. No foreign paper is at present directly imported into the district and, save for small quantities of American blotting paper, 44.5 by 57.5 centimeters, and American writing paper, 46 by 59 centimeters (1 centimeter = 0.3937 inch), practically none is sold in it. German factories amply supply the district's needs, and the district itself, although not well off in the matter of water, wood, and cheap rags, has a number of fair-sized paper mills in it. The district has also many small mills making cheap, low-grade wrapping and box papers from straw of local growth. No statistics as to the paper output of the district are, however, available, nor can the output be in any way estimated.

KEHL, BADEN.

From Consul Milo A. Jewett.

This consular district is a good market for paper of all classes, but it seems scarcely possible that any except a few special forms of technical American papers could be sold here, owing to the fact that Germany supplies the market with practically every variety of paper that is in demand and has a surplus product worth $40,000,000 per annum for export.

The following are a few of the vast number of local wholesale prices. Of course, the prices vary with quantity as well as quality and are subject to varying extensive credits, according to the character of the purchaser. Discount is generally 2 per cent and credits from two to six months.

Articles.	Marks per 100 kilos.	Cents per pound.
India paper	110-160	14 -17
Drawing paper	68-100	7.3-10.8
Press board	50- 60	5.4- 6.4
Writing paper	40- 70	4.3- 7.6
Printing paper, good grade	21- 30	2.2- 3.2
Wrapping paper, good grade	18- 25	1.9- 2.7
Paper pulp, sulphite, first-class	18- 19	1.9- 2.0

The more important data relating to the paper and paper-pulp industries in Baden are shown in the following statement:

Items.	1882	1895	1907
Principal factories	72	71	73
Secondary factories	2	3	....
Factories with 1 to 5 workers	17	4	7
Factories with 6 to 50 workers	39	40	33
Factories with 50 or more workers	16	27	33
Factories with motor power	46	57	68
Persons employed	2,412	5,859	7,398

In Baden in the year 1912 the total paper industry, including manufacturers of paper and the allied industries, counted 155 establishments, 135 with motor power. These establishments employed altogether 11,139 persons, of whom 3,250 were females; 1,060 were from 14 to 16 years old, 2,507 were 16 to 21 years old, and 7,572 were over 21 years old.

The wages in the paper industry cover a wide range of rates, according to the character of the work, the age, sex, and efficiency of the workers. As a fair sample of wage rates, the daily pay in a cellulose factory at Kehl, employing 367 hands, may be quoted. There were 26 workmen at $0.60 to $0.71, 51 at $0.71 to $0.83, 51 at $0.83 to $0.95, 59 at $0.95 to $1.07, 56 at $1.07 to $1.19, 80 at $1.19 to $1.30, 40 at $1.30 to $1.43, and 4 at $1.43 to $1.66.

The general grade of efficiency of labor, especially in the skilled, the technical, and the designing branches is high. Apprenticeship, long and fixed service, and training schools have developed a large body of skilled and efficient workers in this industry. The equipment of the mills is practically all of German make.

There is one wall-paper factory in this district that is interesting and unique. This is the house of J. Zuber & Cie., at Rixheim, Alsace. They are making hand-printed wall paper and still using hand-printing blocks that are more than a century old. This industry was started at Mulhausen in 1790 when the art of printing wall paper was still in its infancy. Malaine, a celebrated designer from the Gobelin tapestry works, was engaged as designer of this wall paper in 1793 and the house acquired an international reputation for artistic wall paper which has continued to this day. Some old New England houses built in the colonial style have been papered and repapered with the Zuber hand-printed papers for many decades. In 1850 mechanical printing with engraved cylinders was introduced but hand printing was continued and is still the special feature of the Zuber factory. These hand-printed papers, where each color is laid on separately and dried before another color is applied, have distinctive character and artistic effects which can not be obtained by cylinder printing. The ancient process permits representations that look more like frescoes than printed papers. Some of the designs require more than 2,000 separate wooden printing blocks, each carefully carved for some part of the general design and color scheme. Papers which in 1840 to 1850 created a sensation are still in demand by people, largely in the United States and in England, who want something exclusive.

LEIPZIG.

From Consul Nicholas R. Snyder.

The demand for paper in this consular district, especially in the city of Leipzig, as the center of the German book industry and trade, reaches enormous quantities, which, mostly, if not all, is supplied by the German paper mills, which during the year 1913 produced almost 2,000,000 tons of boards and paper.

More than one-fourth of the German paper production is made in the Kingdom of Saxony, one-fifth of which is manufactured in the Kreishauptmannschaft of Leipzig.

There are 30 paper mills in this district, of which 19 are in the Kreishauptmannschaft of Leipzig and 11 in the Regierungsbezirk Merseburg in the Province of Saxony, which belongs to this consular district. Several of these mills have a daily capacity of 70,000 kilos (154,324 pounds). The average is about 35,000 kilos (77,161 pounds).

The average daily wage of skilled workmen is 3.50 marks ($0.85).. The "Papiermachinen fuhrer"—i. e., the foreman in charge of the paper-making machinery—receives from 200 to 300 marks ($47.60 to $71.40) per month.

The average price of paper in Germany for the years 1910, 1911, and 1912, per kilo (2.2046 pounds), was 0.29 mark (6.9 cents), or 3.13 cents per pound.

The average price of boards for the same period was 0.16 mark (3.8 cents) per kilo, or 1.73 cents per pound.

Nearly all the paper-making machinery and equipment are supplied by German machine shops.

NUREMBERG.

From Consul Ralph W. Dox.

Statistics concerning the paper production in this consular district are not available. The latest issue of the Bavarian Statistical Annual shows that Bavaria, in the year 1912, exported only 79 tons of paper, valued at $18,564. No importation figures are given, for the German and, principally, the home production supplies the home demand. Only three imported varieties are used in this district, viz, American crêpe, English duplex, and Japanese silk and parchment paper. The Bavarian product is made of rags, wood pulp, and sundry waste materials. Many mills produce their own pulp. All use German machinery.

While the amount of imported paper is negligible, the cause is to be sought in the sufficiency of the native product and not in the prohibitive duties or expensive transportation. American paper can be imported most cheaply from Rotterdam on the Rhine to Mannheim and thence by rail or by the Donau-Main Canal to its destination. A specific feature of the Nuremberg consumption is found in the lithographic printing industry. For this a high grade of printing paper is required, the standard sizes of which are as follows: 46 by 59 centimeter (18.11 by 23.23 inches), 59 by 92 centimeter (23.23 by 36.21 inches), 64 by 96 centimeter (25.20 by 37.80 inches), 66 by 100 centimeter (25.98 by 39.37 inches), 50 by 65 centimeter (19.69 by 25.59 inches), 72 by 106 centimeter (28.34 by 41.73 inches).

PLAUEN.

From Consul R. B. Mosher.

All the paper used in the Plauen district comes from distributing houses in Berlin, Chemnitz, Leipzig, and Dresden. It is reported that American paper is better than German, and one dealer states that he would be willing to take it if the price were not so high. There are no statistics, and it is impossible to give the amounts used in the district. High and medium grades are used for social and commercial correspondence.

There is one pulp mill in the district, at Hartmannsdorf; its output is 10,000 kilos (22,046 pounds) daily. Three paper mills, at Greiz, Schneeberg, and Schonheiderhammer, with outputs, respectively, of 25,000 kilos (55,115 pounds), 12,000 kilos (26,455 pounds), and 5,000 kilos (11,023 pounds) daily. The machinery was supplied by a firm in Wurttemberg. Labor is said to be efficient; unskilled laborers are paid from 7 to 12 cents per hour and skilled laborers from 9 to 17 cents.

STETTIN.

From Consul Henry C. A. Damm.

Paper of all classes is manufactured in this consular district, in the Province of Pomerania, both for home demand and for export to other sections of Germany and foreign countries. The possibility of selling American paper seems, generally speaking, small, except in special lines, such as good-grade note paper in attractive packages, part of the demand being now supplied by England, France, and Austria. Fancy cover papers, such as imitation alligator and snake skin, might find sale. I am informed that the German mills do not yet supply a thoroughly satisfactory manifold typewriting paper. It would be a difficult matter to induce a local dealer to handle American paper for the general demand, since the trade is supplied by the German mills that are fully acquainted with the needs of the consumers as to sizes, qualities, and classes of paper. The trade would have to be approached from a central distributing point located in Hamburg or Berlin.

GREECE.

ATHENS.

From Consul General Alexander W. Weddell.

The Kingdom of Greece is to-day a comparatively small importer of paper, the quantity of the product brought in being valued at between $550,000 and $600,000. The papers most in demand are writing, news, wrapping, tissue, and blotting papers, strawboards, etc. In general, all classes of paper in use are of low grade as compared with qualities seen in the United States, and rather below the qualities in use in more advanced European countries. The publishing trade of the country is a relatively unimportant one and the output may be said to be limited to pamphlets of a political or economic nature, etc., with limited circulations.

Owing to its geographical position and its political relations with the rest of Europe, Greece follows with peculiar intensity and interest international political movements, and this desire to be informed on topics profoundly affecting, for good or ill, the welfare of the country has made of the Greek of to-day one of the greatest newspaper readers in the world. It naturally results that paper for the printing of the numerous publications is the chief article of import in this line, news paper forming about 40 per cent of the total paper brought into this country.

Austria-Hungary leads all countries in the Grecian imports of paper of all kinds, followed by Germany, Netherlands, Sweden, England, and France. The commanding position at present occupied by Austria-Hungary in the paper trade in Greece is to be ascribed to its proximity to the Grecian peninsula and to the excellent transportation facilities offered by the several water lines running from Trieste to Grecian ports. Paper dealers, as a general rule, do not carry large stocks, preferring to order small quantities from time to time. As it is possible to send in telegraphic orders to Austrian houses and to receive a consignment in from three to five days, as compared with much longer periods from other European centers or from the United States, the favorable situation of Austria in relation to this market is apparent.

MARKET REQUIREMENTS.

Paper for newspapers is received as a general rule in rolls of from 5,000 to 6,000 meters (1 meter = 3.28 feet), the width of the paper varying widely, from 56, 60, 63, 72, 86, 94, 126 to 129½ centimeters (1 centimeter = 0.3937 inch). A certain quantity of news paper is received in sheets, the sizes of which also vary widely, from 50 by 86, 64 by 92, 73 by 105, to 81 by 115 centimeters.

Writing paper of ordinary quality is imported in sheets measuring 20 by 30 centimeters; paper of higher grade for social correspondence is 60 by 83 centimeters, 44 by 56 centimeters, and 46 by 59 centimeters.

Bond and ledger papers, imports of which are limited, come in a variety of sizes, varying from 51 by 71, 56 by 80, 60 by 82, 63 by 84, 68 by 86, to 74 by 94 centimeters.

For wrapping paper of the lower grades and for certain grades of cardboard, there exist several manufactories here, described more fully below, which supply in large measure the local demand.

Wall papers are very little used in Greece, due, it is said, to a belief that they are not sanitary; walls are usually kalsomined in white or in some soft tint, and in the houses of the wealthy tapestry is frequently seen.

The tissue paper brought in follows no well-defined size, though a large proportion of the amount imported is in sheets measuring 50 by 80 centimeters. Blotting paper is cut to order, generally in sheets 30 by 46 centimeters. Cloth-lined paper is imported in sheets measuring 70 by 100 centimeters. Sizes of 49 by 56 and 56 by 88 centimeters are usual for parchment. Wax paper is largely of local production and is cut to order.

The use of carbon paper for preserving a record of correspondence is progressing rapidly, keeping pace with the general advance toward more modern methods in business houses; the sheets are cut in the usual cap and letter size used in the United States.

As has been suggested, board of various kinds is manufactured in Greece, with the exception of Bristol board, which is imported, usually in sizes 48 by 64 and 50 by 65 centimeters. Boards of local production are cut to order.

There is, practically speaking, no raw material of local origin available for the manufacture of paper; it must all be imported. The paper of local manufacture, as stated, is in the form of boards and coarse wrapping. For these wood pulp is brought in from Sweden and Austria.

PRODUCTION OF LOCAL MILLS.

The local factories referred to, which supply the local market with board and wrapping papers, are located, respectively, at Corfu, Chalcis, and Phaleron; both board and wrapping papers are manufactured at Corfu and Phaleron; the factory at the first-named point was established in 1908. The standard sizes of cardboard manufactured at these plants are 70 by 100 and 66 by 96 centimeters. These plants sell wrapping paper at 42 drachmas per 100 kilos ($8.10 per 220.46 pounds), the paper being cut in sheets to meet the requirements of the purchaser. The average price of white board is 44 drachmas per 100 kilos ($8.50 per 220.46 pounds). Brown board sells at 40 drachmas per 100 kilos ($7.72 per 220.46 pounds).

The machinery installed at the factory at Corfu is of American production; at Chalcis and Phaleron German machinery of the Pinder type is to be found. The annual output of these factories in metric tons has been estimated as follows by a local expert: Corfu, 600 tons of board and 700 tons of wrapping paper; Chalcis, 75 tons of cardboard; Phaleron, 100 tons of board and 150 tons of wrapping paper. The board and wrapping paper produced in Greece is exclusively for home consumption, there being no export movement.

There is given below a table of imports of paper into Greece for 1912, the latest period for which figures are obtainable, showing the principal countries supplying each class. There would seem to be but slight variations in the paper trade of Greece from year to year, the sources of supply remaining about the same and the effective demand of the market showing no signs of any sensible increase in strength.

Classes.	Pounds.	Value.	Principal countries of origin
Paper pulp of whatever material, bleached or not, as well as pressed, in leaves or in cylinders.	2,298,949	$46,654	Austria, Germany, Turkey, Sweden.
Roofing, glass, emery, and tar paper	234,576	6,328	Germany, Austria.
Blotting papers, varicolored, large or small sheets, of cotton, linen, or jute, paper in cartons for telegrams, etc.	856,618	29,303	Austria, Netherlands, Germany, United Kingdom, Italy, France, United States (for blotting).
Common unglazed paper	1,616,074	77,727	Austria, Germany, Netherlands, United Kingdom, Italy.
Glazed paper	442,741	30,284	Austria, Germany, Netherlands, France, United Kingdom.
News paper	3,854,367	161,665	Netherlands, Germany, United Kingdom, Austria.
Paper for correspondence	12,832	1,757	Austria, United Kingdom, France, Germany, Italy.
Parchment	4,977	749	Germany, Austria, France, United Kingdom.
Ledger and book paper, drawing paper, paper for record books, ruled or unruled.	39,690	4,172	France, Germany, Austria, Italy, Netherlands.
Writing paper of whatever color, unglazed.	42,315	7,953	Austria, Germany, Italy, United Kingdom.
Writing paper of whatever color, glazed	193,876	22,160	Austria, Germany, Netherlands, France.
Blotting and wrapping papers, as well as thin papers for wrapping fruits.	1,725,837	130,458	Austria, Germany, Netherlands, United Kingdom, France.
Wax or other like material	544	90	Austria, France, Germany.
Draft, bond, and other commercial paper, letters and envelopes and fancy papers, colored or silvered or gilded for bouquets, candies, etc.	24,465	16,735	Germany, Austria, France, United Kingdom.
Hat boxes, papier-mâché in forms, etc.	3,524	1,206	Germany, Italy, France.
Same as above, paper de luxe, toys of pressed paper, collars and cuffs, and paper ornaments	1,876	3,108	Germany, Austria, France.
Bonbon boxes	524	718	Austria, Germany, France.
Transparent or silk paper, ruled, or paper for lithographing or making cards, music paper, phototype and film paper.	2,494	7,381	Germany, Austria, France.
All kinds of papier-mâché	519	284	France, Germany, Austria.
Lithographs, woodcuts, and other prints	10,772	7,364	Germany, Austria, France.
Labels in general	4,006	1,377	Austria, Germany, United States.

In the value and quantity of imports of blotting paper the United States runs well ahead of other countries, and it is thought that ere long it will soon have a monopoly of this branch of the trade, and this despite the greater distance and severer credit terms.

The carbon paper market is one that should receive the attention of the American exporter; in quality it is far ahead of the European product.

CREDIT TERMS.

Importers of paper into Greece extend very liberal terms to the trade, a credit of from six to eight months being usual. Some of the larger importing houses prefer to take advantage of the discount offered for cash and to make payment upon receipt of goods.

The direct sailings which now prevail between the United States and Greece, together with the favorable attitude on the part of the Greek nation toward the United States, induce the belief that the present is a favorable time for the American exporters to make additional efforts to inaugurate or to increase sales. Correspondence with local merchants should be in French, and printed matter to be of value must be in the same language. Where possible, prices should be quoted c. i. f. Piræus or Patras. In the preparation of this report interviews have been had with a number of local buyers, and each one expressed the opinion that American papers should find a ready market in this territory.

In general the various Ministries of the Greek Government call for bids for stationery supplies for the respective Ministry as they are needed. A serious drawback to the successful competition of American firms in these cases is to be found in the fact that the time allowed for the submission of bids and samples is usually very limited, generally from 10 to 20 days. For example, a recent advertisement of the Ministry of War for the supply of half a million envelopes called for the submission of bids, with bond for the performance of the work within a period of 13 days. It is obvious that American contractors, unless locally represented, could not hope to enter such a competition.

The Grecian Government is a large consumer of paper for use in the manufacture of cigarettes, the sale of which is a Government monopoly. Contracts for this paper are given out for three-year periods. A full memorandum concerning this was submitted by the consulate general under date of May 13, 1914.

PATRAS.

From Consul Arthur B. Cooke.

All paper used in the consular district of Patras is imported. The amount of these imports, according to official statistics, is not large. In total the declared value is about $75,000 worth per annum. However, the amount actually consumed in the district must be somewhat in excess of this amount, since no small part of the paper consumed here enters the country by way of Piræus, in the district of Athens.

The paper consumed in this district is generally of a low grade. The chief kinds in use are writing paper of all kinds, news paper, and wrapping paper.

Actual test of the local markets shows that the only paper commodity of American origin now offered for sale is blotting paper. It is doubtful whether the American exporter could successfully compete with the European exporter in the cheaper grades of paper, such as wrapping and news paper, on account of the advantages which the European shipper enjoys in freight rates and time of transit.

However, the American shipper ought to be able to compete in the case of finer papers, such as bond and linen writing paper, tissue and carbon papers, and blotting paper. The American blotting paper is superior to the European article and gives far greater satisfaction here.

SALONIKI.

From Consul John E. Kehl.

The various figures covering imports and general trade conditions, as submitted in this report, cover a period prior to the Balkan War. The territorial changes in European Turkey brought about by the war have deprived Saloniki of the greater part of its former commercial field. A large part of Macedonia, formerly supplied by the wholesale and retail houses of this city, is now annexed to Serbia and Bulgaria and naturally under their respective customs administrations. This change, however, will not affect the paper trade to any appreciable extent, for the reason that the greater part of the import is consumed in this city.

The Hellenic customs tariff which went into effect on January 1, 1914, raises the import duty on all kinds of paper from 11 per cent to 15 per cent ad valorem with an additional municipal tax of 1½ per cent, a total of 16½ per cent ad valorem.

Common news print paper has since been placed on the free list. Under the Ottoman tariff paper was subject to an ad valorem import duty of 11 per cent. For customs purposes the local wholesale price minus 15 per cent is deemed to be the market value. Foreign invoices are not accepted, as a rule, for determining the import duty. By this method of establishing customs value, the amount of the import duty is quite frequently in excess of 16½ per cent of actual cost.

Linen, bond, and ledger papers are not at all in use for office purposes. The few local firms using really good stationery have the work done in other countries. Machine-ruled stock forms are not in demand. Paper for social purposes, such as note paper, cards, and envelopes of different sizes, color, and quality, packed in plain and fancy boxes, are mostly of German origin. Trade in better-class stationery of this kind is limited to Saloniki. Loose letter and note paper, envelopes, and cards are to be had in different qualities, sizes, and colors. Memorandum blocks and note and letter paper in pads are not on the market, nor are the Nos. 6½ to 10 envelopes, commonly used in the United States. The annual consumption of writing papers and envelopes of all classes is placed at 100 tons.

The printing establishments of Saloniki are poorly equipped in type and presses. The largest press in this city has a 25 by 36-inch flat bed, used mostly for poster work. There is no demand for fine press work. Cheap work in both quantity and quality prevails throughout this district. Book papers are confined to sized and calendered, also sized and supercalendered papers. Enameled, plate, India, and hand-made papers are too expensive for the local trade. Cover papers are limited to the cheaper grades; the import is very small. The greater part of catalogues and booklets used by local houses are of the "stock" kind supplied by foreign manufacturers to purchasers of their wares. The best quality of book paper used in this city is of Dutch origin, size of sheet 32½ by 22½ inches, sold at $8.10 per 220 pounds c. i. f. Saloniki. The annual consumption of book, circular, and poster papers is about 15 tons.

Austria supplies fully 80 per cent of the news paper consumed in this district. None of the local newspaper plants use roll paper. There is no standard in either size or quality.

The annual consumption in wrapping paper is placed at 1,500 tons and is of Dutch, Belgian, and Austrian origin. Wrapping paper in rolls, varying from 12 to 24 inches in width and weighing 40 kilos (88.18 pounds) per roll, obtainable in various qualities and colors, is delivered c. i. f. Saloniki at $2.70 to $4.27 per 100 kilos (220.46 pounds) according to quality. The greater part of this paper is used for the manufacture of machine-made bags. The best quality of wrapping paper comes in sheets 35½ by 24½ inches and is sold c. i. f. Saloniki at $4 to $6.50 per 100 kilos. This paper is of Austrian origin. Heavy straw paper, sizes 13 by 18 and 18 by 26 inches, selling at $2.80 to $2.90 per 100 kilos, is used for the manufacture of handmade bags. Wrapping paper used by the four largest retail stores in Saloniki is imported by these houses directly from Austria.

MARKET FOR PAPER BOARDS.

The largest consumption in the line of boards, 200 tons per annum, is a white pulp board used for the manufacture of boxes. This board comes in sheets 26 by 37½ inches, weighing 137 pounds per 100 sheets and is sold c. i. f. Saloniki at $3.10 per 220 pounds.

Strawboard in sheets same size as above, weighing 71 pounds to the 100 sheets is sold at $2.72 per 220 pounds. This board is used for the manufacture of boxes, also as a floor covering under linoleum. Annual consumption about 30 tons.

The consumption of strawboard, size 26 by 37½ inches, weighing 137 pounds per 100 sheets, and selling at $3.47 per 220 pounds c. i. f. Saloniki, amounts to 40 tons per annum. This board, of a color similar to dark sole leather, is used as a sole and heel filler of cheap shoes, also for the manufacture of boxes.

White Bristol board, size 22 by 28 inches, mostly in 3 and 4 ply and of different qualities, and stock cards are imported from Germany. Trade in this line is small and does not exceed 10,000 sheets per annum.

GENERAL MARKET CONDITIONS.

The wholesale paper trade of this district is conducted on the side-line basis and not as a distinct business. With the exception of a very small quantity of paper used for social purposes, all other papers are of cheap quality. High-grade papers do not enter into consideration. If American manufacturers can undersell their European competitors, local importers will buy from the United States. Quotations are based on c. i. f. Saloniki. Terms of 25 per cent with order, balance against documents on arrival of merchandise in Saloniki, is recommended.

ITALY.

GENOA.

From Consul General J. E. Jones, Genoa.

Paper manufacture in Italy is a widespread industry of considerable importance, although more developed in some parts than in others. Most of the paper consumed in Italy is of Italian manufacture. It is estimated, however, that over 25,000 short tons of paper and pasteboard are imported into Italy yearly, while the total annual exports of paper and pasteboard from this country are estimated to be about 16,000 short tons. The annual production of the paper mills of Italy is estimated to be about 297,624 short tons of paper and pasteboard, while the output of mechanical wood pulp and cellulose is estimated at 69,000 short tons annually. The magnitude of the paper and wood-pulp industry in Italy is concisely given in a publication entitled "Annuario dell'Industria Cartaria in Italia," 1913, edited by Carlo Minni, Milano, Italy. On pages 11 to 14 of this book the following statistical information is given:

ITALIAN PAPER STATISTICS.

There are 388 firms in Italy manufacturing paper, pasteboard, and wood pulp, with 473 establishments, of which 437 are in operation and 36 are idle.

Production.—Of the 437 establishments in operation, only 362 are considered in the statistics of the "Annuario dell' Industria Cartaria in Italia," these producing daily an average of 737,690 kilos (813 short tons) of paper and pasteboard and 121,750 kilos (134 short tons) of wood pulp and cellulose. For the 69 establishments in operation, statistics of which are lacking, the following daily average production is estimated: Paper and pasteboard, 173,700 kilos (191.5 short tons); wood pulp and cellulose, 91,000 kilos (100.3 short tons). The annual production, therefore, considering the year as 300 working days, can be considered as approximately: Paper and pasteboard, 270,000 metric tons (297,624 short tons); wood pulp and cellulose, 63,000 metric tons (69,440 short tons). The figures 63,000 metric tons (69,440 short tons) should be reduced, as firms have evidently stated their production of mechanical wood pulp without stating that it is wet wood pulp, not dry wood pulp, which is as 88 to 100. The 3 cellulose factories in operation can produce altogether about 5,000 metric tons (5,512 short tons) of cellulose annually.

Labor.—There are about 26,000 persons engaged in the paper-manufacturing industry in Italy; that is, in the 437 establishments in Italy making paper, pasteboard, and wood pulp. There are about 22,482 persons employed by 285 firms, while 66 other firms with mills in operation employ about 3,510, making a total of about 26,000 persons in all.

Motor power.—The motor power used in the paper industry in Italy is estimated to be about 73,000 horsepower, and the "Annuario" gives figures for 271 firms as follows: Hydraulic, 37,940; electric and hydroelectric, 12,406; steam, 6,002; gas (low), 1,328; total, 57,676 horsepower. For the other 117 firms it is estimated that the motor power must be about 15,000 horsepower, making a total of almost 73,000 horsepower.

Location of industry.—The paper mills manufacturing paper, pasteboard, wood pulp, and cellulose in Italy are distributed as follows:

Provinces.	Active.	Closed.	Provinces.	Active.	Closed.
Tuscany	115	7	Marches	9	2
Lombardy	70	1	Umbria	6	2
Liguria	64	4	Abruzzo	2	1
Piedmont	47	....	Sardinia	2	....
Campania	45	7	Molise	1	....
Venetia	29	2	Calabria	1	2
Lazio	27	4	Sicily	1	1
Emilia	18	3			
				437	36

Of 385 active establishments making paper and pasteboard, only 5 work by hand. Of 34 closed establishments making paper and pasteboard, only 3 worked by hand. Of 22 active and 3 closed establishments making paper, pasteboard, and mechanical wood pulp, 2 have in operation the part making mechanical wood pulp, while the part making paper and pasteboard is closed.

Machinery.—The machinery in all the 473 establishments (excluding none) adapted to the manufacture of paper, pasteboard, mechanical wood pulp, and cellulose is as follows:

Machinery.	Active.	Closed.	Total.
Continuous machinery 13 feet wide	1	....	1
Continuous machinery 6½ to 9 feet wide	19	1	20
Continuous machinery 3.28 to 6½ feet wide	180	12	192
Continuous machinery less than 3.28 feet wide	10	....	10
Continuous machinery of undetermined width	43	2	45
Total	253	15	268
Cylinder machinery more than 3.28 feet wide	234	15	249
Cylinder machinery less than 3.28 feet wide	6	....	6
Cylinder machinery of undetermined width	75	8	83
Total	315	23	338
Vats for making handmade paper	97	11	108
Grinding machinery for mechanical wood pulp manufacturing	105	1	106

There are 36 establishments producing mechanical wood pulp, which are found in the following regions: Piedmont, 12; Lombardy, 5; Venetia, 5; Tuscany, 1 (and 1 closed); Campania, 13. The 3 establishments making cellulose are situated as follows: Piedmont, 1; Lombardy, 1; Emilia, 1; Calabria, 1 (closed). The number of firms in Italy manufacturing paper products, such as boxes, envelopes, labels, tablets, playing cards, flowers, lanterns, etc., is 454, which are found in the following regions of Italy: Piedmont, 80; Lombardy, 170; Venetia, 20; Liguria, 25; Emilia, 20; Marches, 3; Tuscany, 65; Umbria, 2; Lazio, 17; Abruzzo, 1; Campania, 30; Puglia, 1; Calabria, 1; Sicily, 19.

ROYAL EXPERIMENT STATION.

The scope of the Royal Experiment Station for the Paper Industry and the Study of Textile Fibers (Piazza Cavour 4, Milan, Italy) is outlined on pages 37 and 38 of the above-mentioned volume. Officers of the principal paper associations and the scopes of these associations are to be found on pages 39 to 42, while the financial results of the principal stock companies in the paper industry in Italy up to March 31, 1913, are given on page 34.

It is estimated that 165,346,680 pounds of wood pulp are consumed in Italy annually, according to an Italian trade journal (Revue Financière et Economique d'Italie), and of this amount only 19,800,000 pounds are imported, so that the rest is produced in Italy, and for the manufacture of which only poplar wood is used. To produce this amount of wood pulp in Italy this journal states it is necessary to cut down about 398,000 poplar trees each year. These figures are determined by granting that the relation between the raw material and the wood pulp is 3 to 1 and the weight of the poplar trunk is 5 quintals (1,102 pounds). The culture of poplar permits obtaining 600 trees per hectare (2.47 acres), so that 10,000 hectares would be occupied by the trees consumed for this amount of wood pulp.

It is said that the manufacture of paper by hand still has a certain importance in the Provinces of Macerata, Lucca, Ancona, Salerno, Caserta, Treviso, and Brescia, while machine-made paper is manufactured principally in the Provinces of Novara, Milan, Como, Lucca, Rome, and Caserta, and that the grinders for wood pulp are found chiefly in the Provinces of Caserta, Novara, Belluno, Vicenza, and Verona.

Profits and losses of stock companies in the paper industry (15 mills) have been compiled by financial journals in Italy, and in the year 1911 the total net profit was placed at about $718,000, according to La Finanza Italiana.

In all, Italy presents a market for the sale of American paper and pasteboard and machinery for paper mills, limited, it is true, but well worth considering. A large amount of the machinery in Italian paper mills is of German make.

The Italian paper industry, besides enjoying protection by the import tariff on paper, is aided in supply of raw materials by an export tax of 8.80 lire ($1.69) per 100 kilos (220.46 pounds) on rags exported from Italy—that is, about $15.40 per short ton. Thus for the wrapping paper manufactured in this district, the city of Genoa provides much of the raw material in the form of rags, rope, jute waste, and heavy waste paper.

STATISTICS OF IMPORTS.

Statistics of importation of paper in Italy, by classes of paper, are as follows:

Articles and countries of origin.		1911	1912	1913
White paper or paper died in pulp:				
Unruled—				
Austria-Hungary	pounds	491,630	279,326	253,532
France	do	420,421	796,751	835,993
Germany	do	5,098,630	5,223,412	5,312,699
United Kingdom	do	615,090	486,340	585,327
Other countries	do	832,686	660,505	863,771
Total	do	7,458,457	7,446,334	7,851,322
	value	$424,410	$436,757	$460,512
Ruled	pounds	146,386	142,198	102,074
	value	$12,815	$12,822	$9,204
Envelopes	pounds	68,123	52,250	44,754
	value	$6,560	$5,169	$4,427
Colored or painted paper (or gilded paper, and bleached paper for lithography and photography):				
France	pounds	129,852	130,734	121,916
Germany	do	778,452	837,977	810,419
United Kingdom	do	114,641	130,073	127,868
Other countries	do	139,552	175,929	174,606
Total	do	1,162,497	1,274,713	1,234,809
	value	$142,450	$161,809	$156,744
Vegetable parchment	pounds	74,957	82,012	110,672
	value	$5,906	$6,677	$9,009
Blotting paper, amount imported	pounds	117,065	121,695	107,806
	value	$9,736	$10,121	$8,966
Wrapping paper:				
Of straw undyed, etc	pounds	7,275	41,226	7,716
	value	$115	$505	$95
Of yellow straw, undyed, glazed on one or both sides	pounds	20,283	6,834	18,519
	value	$320	$84	$227
Of mechanical wood pulp, steam cooked, of natural brown color, also glazed on one or both sides	pounds	1,793,901	1,953,516	1,536,181
	value	$37,691	$34,204	$26,897
Of cellulose, not white, undyed, of weight less than 40 grams per square meter—				
Glazed on one side only	pounds	156.307	99,869	85,538
	value	$4,789	$3,060	$2,621
Glazed on two sides	pounds	20,062	3,307	4,409
	value	$650	$107	$143
Other wrapping paper	pounds	676,598	489,647	341,276
	value	$15,998	$12,431	$8,6

Articles and countries of origin.		1911	1912	1913
Pasteboard:				
Ordinary, neither dyed nor glazed—				
Austria-Hungary	pounds	30,684,154	31,485,317	33,399,811
Germany	do	500,449	972,238	434,311
Netherlands	do	1,212,983	1,805,806	520,070
Other countries	do	559,533	397,052	297,403
Total	do	32,957,119	34,660,413	34,651,595
	value	$548,184	$591,686	$591,536
Ordinary, dyed in pulp, not glazed	pounds	679,685	548,510	669,103
	value	$14,280	$12,005	$14,644
Ordinary, glazed	pounds	448,200	516,322	355,165
	value	$32,174	$37,065	$25,496
Fine pasteboard	pounds	335,764	462,309	335,323
	value	$39,682	$54,637	$39,630
Paper or pasteboard tubes, spools, or bobbins, for spinning and weaving	pounds	200,620	198,857	234,792
	value	$31,613	$31,335	$36,998
Pasteboard, cut in pieces or folded, for works of pasteboard	pounds	....	5,952	4,189
	value	....	$642	$330
Works of pasteboard or of cellulose, shaped by stamping or compressing	pounds	2,425	3,307	4,629
	value	$212	$290	$405
Paper and pasteboard works, not specified—				
Austria-Hungary	pounds	113,318	133,379	124,562
France	do	128,309	122,577	142,685
Germany	do	502,654	489,647	461,427
Other countries	do	112,656	117,728	128,529
Total	do	856,937	863,331	857,203
	value	$225,057	$226,736	$225,115

EXPORTS OF PAPER AND PASTEBOARD.

The exportation of paper and pasteboard from Italy during the past three calendar years, by classes of goods, was as follows:

Articles and countries of destination.		1911	1912	1913
Paper and pasteboard works, not specified:				
Dutch East Indies	pounds	....	228,840	452,609
Egypt	do	76,059	78,705	95,671
Other countries	do	302,033	538,810	686,960
Total	do	378,092	846,355	1,235,240
	value	$99,300	$222,278	$324,414
White paper or paper dyed in pulp:				
Unruled—				
Austria-Hungary	pounds	2,419,132	3,221,615	1,019,417
France	do	105,822	335,984	80,469
Germany	do	237,879	311,954	297,844
United Kingdom	do	671,969	827,174	646,836
European Turkey	do	288,365	7,055	135,364
India and Ceylon	do	184,747	159,615	198,857
Asiatic Turkey	do	281,310	37,258	106,704
Egypt	do	402,785	732,816	393,966
Tripoli	do	53,793	414,028	364,645
Argentina	do	762,358	713,195	1,123,035
Brazil	do	1,721,369	1,378,330	1,225,329
Chile	do	888,463	724,659	510,150
Peru	do	213,187	222,667	305,340
United States	do	845,032	199,077	314,820
Other countries	do	874,133	1,395,967	1,394,644
Total	do	9,950,344	10,681,394	8,117,420
	value	$827,532	$935,085	$426,376
Ruled—				
India and Ceylon	pounds	482,371	434,972	553,140
Egypt	do	813,506	628,097	609,358
Argentina	do	2,662,302	1,384,282	2,664,948
Brazil	do	1,486,136	994,285	1,210,558
Chile	do	385,368	288,805	270,507
Other countries	do	1,208,133	926,832	1,282,870
Total	do	7,037,816	4,657,273	6,591,381
	value	$523,697	$346,523	$490,477
Envelopes	pounds	679,465	1,041,464	985,687
	value	$59,483	$91,173	$86,290

Articles and countries of destination.		1911	1912	1913
Colored, painted, gilded, etc., paper (including paper for lithography and photography)	pounds..	263,452	351,858	515,220
	value....	$34.595	$46,204	$67,656
Vegetable parchment	pounds..	....	1,543	1,323
	value....	....	$114	$98
Blotting paper	pounds..	101,192	9.480	22,487
	value....	$7.973	$947	$1,772
Wrapping paper:				
Of straw, undyed, etc	pounds..	4,048,569	4,302,100	7,738,444
	value....	$60,252	$56,493	$101,617
Of yellow straw, etc	pounds..	9,259	7,275	17,196
	value....	$154	$105	$256
Of mechanical wood pulp, etc	pounds..	3,086	1,543	86,098
	value....	$65	$30	$1,639
Other wrapping paper	pounds..	5,493,037	3,104,549	1,436,311
	value....	$129,837	$67,945	$31,435
Pasteboard:				
Ordinary—				
Undyed, unglazed	pounds..	1,044,550	1,522,292	1,319,026
	value....	$22.865	$46,643	$40.415
Dyed in pulp, unglazed	pounds..	2.206	8,157	11,464
	value....	$48	$179	$251
Glazed	pounds..	26.896	2,646	....
	value....	$1,884	$185	....
Fine pasteboard	pounds..	274.696	176,590	262.791
	value....	$32.465	$20,870	$31,068
Tubes, spools, or bobbins of paper or pasteboard, for spinning and weaving	pounds..	88.185	98.106	71,430
	value....	$7.720	$8.589	$6,253
Wall paper	pounds..	27,778	18.739	33.290
	value....	$1,945	$1,312	$2,331

The above statistics are those of the Italian customs office of the Ministry of Finance, definitive figures for the years 1913 not being available as yet.

The blotting paper used in Italy is of an inferior grade, and although such paper is not used so generally in Italy as in America, it presents an opportunity for the sale of American blotting paper, which is much superior to the article of present consumption or to that imported from other countries in Europe. A local merchant states that effort has been made to import American blotting paper, unsuccessfully in his case, on account of the fact that the American exporting firm established an agency in Paris for the European market and sent out traveling salesmen, so that he did not find it worth while in that case. However, he is of the opinion that American blotting paper should sell well here, provided it can be sold cheap enough to increase its number of sales. In most of the rural districts of Italy blotting paper is not used at all, such primitive methods as the use of sand for drying ink being in vogue in some parts. In other districts the blotting paper is so thin and nonabsorbent as to be of little or no value. This is so also of that used in the large cities.

Letterpress copying is used more generally in Italy than in America, due to the fact that the Italian law permits the presentation of letterpress copies of papers or documents in a legal case in court, whereas carbon copies may not be so presented in evidence. For this reason also typewriter paper is not used to the same extent in Italy that it is in America, as most letters in offices are letterpressed and carbon copies of them are not taken. However, as the typewriter is becoming more and more popular in Italy, large amounts of typewriting paper are used for first sheets, that is, as official letters, etc.

Railway freight rates on paper, pasteboard, cellulose, wood pulp, etc., in Italy may be found in the Annuario dell'Industria Cartaria in Italia, pages 54 to 70, classification of merchandise on pages 55 to 58, railway freight rates for slow freight ("piccola velocita") on pages 59 to 62, while distances between cities and places in Italy where paper is manufactured are given in kilometers (0.62137 mile) on pages 65 to 70. The tariff of freight rates is levied according to the kilometric distance traveled, so that the three tables, the nomenclature of goods, the tariff of rates, and the distance, must be used together in computing the freight rate.

RULES AND USAGES IN THE PAPER INDUSTRY.

The following code of rules and usages in the paper industry and commerce were discussed and approved by the Association of Manufacturers of Paper (Associazione dei Fabbricanti di Carta) in general assembly, May 22, 1914:

1. The consignee must specify his order with the greatest exactness, indicating: (*a*) The quantity, with the number of reams or else the total; (*b*) the quality, referring to a type, mark, or sample; (*c*) the color or dye, referring to a type, mark, or sample; (*d*) the size, in centimeters, the half centimeter being the minimum fraction admitted; (*e*) the weight in kilos per ream, or in grams per square meter; (*f*) the rosin sized, without rosin, and half rosin, or slightly rosin, strongly rosin; (*g*) the grade of smoothness (glazed) and of shine (lucidity), rough, glazed by machinery, lucid, very lucid; (*h*) the preparation, packing and wrapping desired; (*i*) all the agreed conditions, price, terms of shipment, regulation.

2. In lack of contrary conventions and agreements at the time of the contract, those of the present code have contractual value.

3. The orders received, as also the regulation of accounts, executed by means of the agents of the furnishers, are always subject to the reserve of approval by the furnisher; said reserve has 10 days' time for falling due. Silence is equivalent to approval.

4. Paper is contracted for by weight, or by ream and roll, of a nominal established weight. The ream of paper spread out is, by rule, composed of 500 sheets. For the other computations of the ream and for folded paper analagous conditions must be made at the time of the order.

5. The nominal weight of the paper, prescribed in the order, is considered as average weight, on which is conceded an allowance for short or excess measure: Up to 6 per cent for paper less than 20 grams per square meter; 4 per cent for paper from 20 to 40 grams per square meter; 3 per cent for paper from 40 to 180 grams per square meter; 4 per cent for paper from 180 to 240 grams per square meter; 8 per cent for paper over 240 grams per square meter; 5 per cent for all "carte a mano" and in general for all air-dried paper (gelatined); 5 per cent for all paper in rolls; 6 per cent for all packing paper. Single sheets or pieces detached from rolls, heavier or lighter than the allowance, are not admitted for judgment of the total of the lot.

In case that the consignee has set a maximum or minimum weight for his paper, the displacement of the allowance not being capable of being produced in but one sense, the limit of allowance can reach double the quantity above given.

6. In the nominal weight of the paper is included that of the wrapping of the ream, of the packages, or of the rolls; that is, that of the wrapping paper, pasteboard packing (layers of reinforcement), ribbons, or cords.

Thus the wooden spool for paper in rolls is also considered as in the weight of the paper, except credit is given at the same price on delivery franco railway station of the factory or origin.

7. The weight to be invoiced is the nominal weight when the paper is contracted at a price for ream; the effective price when the price is by weight. For differences of weight which remain in the limits of allowance no tare or allowance is granted.

8. Papers spread out are furnished as a rule uncut (that is, with rough edges, without trimming); and with this is meant with cuts which come from the continuous machinery, except crude straw paper. On this paper is granted an allowance in the measure of one-half centimeter (5 millimeters) more or less on each of the two dimensions. Equal allowance is given for the breadth of the paper in rolls. On cut paper the difference of measure allowed is 2 millimeters.

9. Orders of special paper must never be less than 500 kilos in white paper and 1,000 kilos in colored paper for every quality, color, size, and weight. The consignee is obliged to accept an excess amount manufactured, and this without any indemnity, with 10 per cent allowance. If the order is less than 1,000 kilos the limit of allowance will be 30 per cent.

10. In the limits of the quantities, of which by article 9 the consignee is obliged to accept of the specially made paper also the second choice resulting in quantity up to 15 per cent, the second choice undergoes a lowering of price of 10 per cent.

11. Slight differences of color, purity, and tenacity of the paper furnished do not constitute cause for claims or refusal to receive the goods on part of the consignee; the same little differences will also be tolerated between the different parts of the same order, but as to the color they must be accurately separated in the choice and pointed out to the consignee in the invoice.

12. The degree of "collatura" rosin must always be prescribed; it is a rule that paper for printing is manufactured with half "colla" (half rosin size).

13. Except for special conventions at the time of order, the manufacturer is free to prepare his mixture pulp as he likes best, under the condition of reproducing conscientiously the properties required by the type, mark, or sample used as a base.

Special conventions regarding the mixture pulp can require principally: (*a*) That the paper be of pure rags, and this means without substitutes, and also without the addition of minerals; (*b*) That the paper be of wood pulp, and this means that also composed of some kind of vegetable fiber, it does not contain mechanical wood pulp. On these papers, analysis can show traces of wooden substances also not containing mechanical wood pulp mixtures.

14. In furnishing news paper in rolls waste paper is not accepted in return. The rolls which are shown to be defective, must be held at the disposal of the furnisher, and the liquidation of the invoice in accordance with the number of copies of the newspaper is not permitted.

15. Paper in rolls simply with paper wrapping and iron bands as supports is invoiced gross for net weight.

16. Packing is also always invoiced.

17. The terms of shipment must always be established in the order.

18. Important interruptions of work in the factory, caused by force major, strikes in the establishment of the furnisher, exempt one from the obligation of consignment, if advice is given thereof. The supplies or lots falling due from these reasons are not necessary, and must be reported and also the consignee has the right of holding them as annulled.

19. The executive domicile of consignment is always that of the supplying factory, also when it is agreed that the goods are given franco domicile of the customer.

20. The goods always travel on account of and at the risk of the consignee, also when the prices are agreed for goods delivered franco destination; and they are not insured except on express orders of the consignee.

21. Unless special conditions of payment are established, it is held as agreed that, payment by cash 30 days, 2 per cent discount.

22. Special domicile of jurisdiction, to whatever effect, is that of the furnisher (consignor).

23. Claims must be made at a maximum of within 10 days from receipt of the goods. In case of contest regarding eventual technical questions of quantity, the usual term in which to claim, expires in eight weeks from the receipt of the goods.

In contest as to questions of a technical nature, resort will be had to the decision of the Chemical Laboratory for the Testing of Paper (now the Royal Experimental Station for the Study of Paper, i. e., Regia Stazione Sperimentale per lo Studio della Carta), situated near the Royal Superior Technical Institute in Milan (Regia Instituto Tecnico Superiore), or the Testing Institute for Paper (Gabinetto di Assaggio per le Carte), at the office of the Royal Industrial Museum of Turin.

TURIN.

From Vice Consul Piero Gianollo.

The paper industry is represented in Italy by 388 concerns (47 in Piedmont), owning 473 mills, all of which make paper of various descriptions; 36 (12 in Piedmont) manufacture also mechanical and 3 (1 in Piedmont) chemical wood pulp from the poplar, *Populus alba*, and the aspen tree, *Populus tremula*.

The origin of the industry dates far back; the first hand-made paper mill was set up in Fabriano in the then marquisate of Ancona during the year 1276.

The majority of the Italian factories are small; some 120 (14 in Piedmont), however, are large and quite up to date, having been transformed in recent years and equipped with the most modern and efficient machinery, so that they are believed to be second to none in Europe. Ninety per cent of the machinery in use is of German make, some of which imitate American models and the American disposition of the machines; the remainder is furnished by Belgium, France, and Italian manufacturers.

WAGES AND PRODUCTION.

The average wages paid by the most important Piedmontese mill, the Cartiera Italiana of Turin, where 2,100 hands are employed, are: Men and women, $0.434 per day; the minimum for women and young men is $0.232; and the maximum paid to a few foremen, $1.16.

The product of the mills covers all kinds of paper—news paper, straw, wrapping, packing, writing, printing, fibrous, match, chrome, filtering, vellum, cigarette, tracing, blotting paper, pure rag paper for documents, etc. Two factories in Italy (one in Piedmont) make India paper for the printing of Bibles. The Cartiera Pietro Miliani, of Fabriano, Province of Ancona, with a capital of $1,000,000, employing 1,200 workmen, is the only handmade-paper mill in Italy and is known all over the world for its reticulated paper for bank notes. Cardboard of every description, including asbestos cardboard, is also manufactured in Italy. Besides the paper mills proper, there are 454 concerns manufacturing stationery, ledgers, copy books, etc., of which 80 are in Piedmont.

The denominations and standard sizes of paper are innumerable. The commercial designations and measurements in millimeters (1 millimeter = 0.03937 inch) most in vogue for letter paper are the following: Ottavina, 21 by 12.5; sestina, 22.5 by 10; quartina, 27 by 28; mezzanella, 36 by 23; olandina, 38 by 25; quadrotta, 44 by 27; and quadrotta grande, 48 by 29.3.

The designations and measurements in millimeters most in vogue for supplies to the Italian Government are the following: Processo, 38 by 27; protocollo, 44 by 32; rispetto, 46 by 34; leone da Stato, 49 by 37; doppio processo, 54 by 38; bastarda, 55 by 44; doppio protocollo, 64 by 44; reale, 62 by 46; realone, 64 by 48; doppio rispetto, 68 by 46; doppio leone da Stato, 74 by 49; imperialino, 70 by 53; quadruplo processo, 76 by 54; sott imperiale, 76 by 54; imperiale, 78 by 58; doppia bastarda, 88 by 55; quadruplo protocollo, 88 by 64; doppio reale, 92 by 62; colombier, 90 by 63; quadruplo rispetto, 92 by 68; doppio realone, 96 by 64; quadruplo realone da Stato, 98 by 74; doppio imperialino, 106 by 70; ottuplo processo, 108 by 76; doppio imperiale, 106 by 78; and quadruplo bastarda, 110 by 88 millimeters. The reams consist of 500 sheets.

The growth and importance of the Italian paper industry may be inferred from the importation of chemical wood pulp. This was 34,969 tons in 1905 and increased gradually, reaching a climax in 1913 with 86,102 tons, valued at $4,154,436. Of this, 32,844 tons were imported from Germany, 31,818 from Austria, 15,397 from Norway, and the remainder, in order, from Sweden, Switzerland, Roumania, and other countries.

Vegetable and animal fiber rags are furnished largely by the home market, but are also imported from abroad. In 1913, 5,298 tons, valued at $624,303, were imported. Of these, 1,532 came from Germany; 1,479 from France, the majority of which were of animal fiber; 1,267 of vegetable fiber from the United States; and the remainder from Switzerland and other countries.

EXPORT AND IMPORT TRADE.

The Italian production of paper, which, as stated before, is valued at $23,000,000, is almost entirely consumed by the home market. The exports reached a value of $1,585,497 in 1913, against $1,428,640 in 1912, directed, in order, to Argentina, Brazil, Austria-Hungary, and many other countries. The official statistics do not minutely specify the classes of paper exported. The bulk is represented by white paper or paper dyed in pulp, ruled and unruled, and cigarette paper.

Against the exports, the figures of the imports are of little consequence; their value was $531,082 in 1913, against $522,025 in 1912, coming for the most part from Germany, and the remainder, in order of importance, from France, United Kingdom, and other countries. These imports may be explained by the natural international exchange of a few very special and fine types; typewriter paper, for instance, is furnished, in some degree, by the United States and fancy letter paper of high grade by England and France.

The value of the exports of cardboard is negligible, while, on the contrary, the imports were considerable—16,334 tons, valued at $671,305, in 1913, against 16,434 tons, valued at $695,379, in 1912. Nearly all of this cardboard came from Austria and was of common quality, neither colored nor glazed.

The factors against the possibilities of American paper manufacturers entering the Italian market may be summarized as follows: (1) The high development of the industry and its up-to-date mechanical equipment (it is not probable that the industry will progress further in the near future, so that American exporters of paper machinery can not expect much from this market); (2) the comparatively low cost of power and the low price of skilled labor in Italy; (3) the Italian tariff protection, more likely to be increased than decreased in 1917, when many commercial treaties between Italy and foreign countries will come to an end. Besides, competition between Italian manufacturers is exceedingly keen and the prices made to consumers are cut to the limit.

CATANIA.

From Consul A. W. Weddell.

At the present time, because of the high duty levied by the Italian Government, the very great proportion of paper of all kinds used in this district is of Italian manufacture; foreign-made papers represent perhaps less than one-tenth of the amount consumed locally.

It may be remarked generally that while it is thought that local buyers and consumers are favorably disposed toward American products, including paper, yet (*a*) the additional time required to fill orders if sent to the United States, especially when it is recalled that Italian dealers carry very small stocks; (*b*) the lack of direct representatives in the district who could exhibit samples and quote prices; and (*c*), of prime importance, the high duty referred to above, are thought to be great obstacles in the way of developing a market for American paper in this territory at the present time, especially when it is recalled that the first and second difficulties just mentioned are likely to be of a continuing character.

MARKET REQUIREMENTS.

The principal countries, excluding Italy, now sending papers into this district, with the kind of paper generally supplied, are the following: France, letter and drawing paper; United Kingdom, letter, blotting, glazed, and carbon; Germany, fine letter, carbon, parchment, and various grades of drawing paper; Austria-Hungary, ordinary wrapping paper and cardboard of various grades.

The following extracts are from statements submitted by the chambers of commerce of the four leading cities of the district relative to the trade. It should be remarked that no figures are obtainable showing the import movement by railway, and the data which follow, covering only the maritime movement, are interesting more especially as showing the general direction and character of the imports of this commodity.

Reggio-Calabria.—In the year 1912 there were brought into this district, the product of Italian manufacture, 26 metric tons of paper of various kinds, and from abroad 5 metric tons. These figures refer only to the imports by sea; it is not possible to give figures for the movement by rail.

Messina.—Imports in 1912 and first six months of 1913, respectively, were: White and toned paper, uncalendered and mostly unruled, 1.836 and 4.261 metric tons; blotting paper, 0.386 and 0.31 ton; wall paper, 0.246 ton (in 1913); and calendered and glazed paper, 2.24 and 0.637 metric tons.

Catania.—Imports in 1912 were: White paper, uncalendered and unruled, 0.162 metric ton; toned papers, 0.082 ton; wrapping paper, all grades, 4.709 tons; calendered papers, 4.045 tons; cardboard, all grades, 328.232 tons; total value, $12,985.

Syracuse.—Imports in 1913 were as follows: White paper, uncalendered and unruled, 15 tons; white paper, uncalendered and ruled, 13.656 tons; white paper, uncalendered envelopes, 1.18 tons; wall paper, 0.807 ton; wrapping paper, straw, in sheets, 40.805 tons; wrapping paper, straw, on cylinders, 131.371 tons; total value, $9,714.

A leading paper merchant of this city (Catania) has made the following estimate of the average quantity of paper of various kinds sold in this immediate section each year for the past few years: White or toned paper, uncalendered and unruled, 3.5 metric tons; white or toned paper, uncalendered but ruled, 0.75 ton; in the form of envelopes, 0.15 ton; colored, 0.25 ton; blotting, 0.225 ton; calendered and glazed, 10 tons; ordinary cardboard, various grades, 225 tons.

In the absence of authoritative figures and of any source from which they can be obtained, the above is submitted, but with a reservation.

FLORENCE.

From Consul Leo J. Keena.

In the local market for correspondence, business, and typewriter papers, foreign-made papers are largely found competing with similar grades of Italian papers. The English mark is so well considered in Italy as a guaranty of quality in paper that a large part of the Italian correspondence and typewriter papers on sale here are watermarked in English.

There should be a market for American-made correspondence and typewriter papers in this district, as English and German papers of that class have a ready local sale in competition with the home product.

One noticeable feature of the local market is the inferior grade of the correspondence and typewriting papers in general use. There are many factors influencing this condition: (1) The internal postal rate for Italy on first-class mail matter is $0.03 for each 15 grams or fraction thereof (1 ounce avoirdupois = 28.3495 grams), and it is customary in all business stationery to use a double sheet of paper approximately 8½ by 11 inches; the paper, therefore, must be very light in order to keep under the postal rate; (2) the Italian manufacturer has to import practically all his raw material.

GENOA.

From Consul General J. E. Jones.

Merchants in Genoa state that this city presents a market for the importation of paper and that American exporters could find fairly good sales here for their products in this line.

The kinds of paper most widely used in Genoa are writing paper, news paper, wrapping paper, and parchment. Of the writing paper, the average and lower grades (la cancelleria, medio, e comune) are the most popular. The grades known as "Grisetta," "Bleu fino," and "Comune" are the ones mostly in demand. These are manufactured for the local trade in small mills at Voltri, near Genoa, where the daily output is about 120 quintals (about 26,460 pounds), sold and consumed almost wholly in Genoa. Such mills and other small paper factories in Liguria are said to be generally limited to a profit of about $1.32 per long ton of paper. Printing paper used in Genoa comes largely from mills situated elsewhere in northern Italy, in Piedmont and Lombardy. These mills are said to make an average profit of about $1.64 per long ton.

The following are considered by local merchants as representative types of paper, with standard measurements, entering into the trade in this district. The prices are for 100 kilos of paper at railway station Genoa—that is, "franco stazione," city octroi tax excluded. City octroi duty is 7 lire ($1.35) per 100 kilos (220.46 pounds).

Printing paper, fine quality: Sizes, 57 by 78 centimeters (22.44 by 30.71 inches), 64 by 86 centimeters (25.2 by 33.86 inches), 68 by 90 centimeters (26.77 by 35.43 inches), 75 by 100 centimeters (29.53 by 39.37 inches), 60 by 80 centimeters (23.62 by 31.5 inches), 66 by 96 centimeters (25.98 by 37.8 inches), and 70 by 100 centimeters (27.56 by 39.37 inches); price, 68 to 70 lire ($13.124 to $13.51) per 100 kilos (220.46 pounds); weight, 70 to 140 grams per square meter (2.47 to 3.67 ounces per 10.764 square feet).

Printing paper, average quality: Sizes, same as above; price, 58 to 60 lire ($11.194 to $11.58) per 100 kilos; weight, 60 to 150 grams per square meter (2.116 to 5.29 ounces per 10.764 square feet).

Printing paper, common or low quality: Sizes, same as above; price, 45 to 48 lire ($8.685 to $9.264) per 100 kilos; weight, 45 to 140 grams per square meter (1.6 to 4.94 ounces per 10.764 square feet).

Ordinary or low quality paper for newspapers, circulars, manifests, etc.: Sizes, 66 by 96 centimeters (25.98 by 37.8 inches), 70 by 100 centimeters (27.56 by 39.37 inches), and 62 by 84 centimeters (24.41 by 33.07 inches); price, 36 to 40 lire ($6.948 to $7.72) per 100 kilos; weight, 32 to 50 grams per square meter (1.13 to 1.76 ounces per 10.764 square feet).

Writing paper: Sizes, 44 by 56 centimeters (17.3 by 22.1 inches) and 47 by 58 centimeters (18.5 by 22.84 inches); weight, 45 to 70 grams per square meter (1.6 to 2.47 ounces per 10.764 square feet).

Parchment paper, 85 to 90 lire ($16.405 to $17.37) per 100 kilos.

Extra strong paper, 160 to 200 lire ($30.88 to $38.60) per 100 kilos.

Fino extra, 80 lire ($15.44) per 100 kilos.

Fino, 70 lire ($13.51) per 100 kilos.

Medio (average), 60 lire ($11.58) per 100 kilos.

Comune (common), 50 lire ($9.65) per 100 kilos.

Register or account-book paper: Sizes, 60 by 80 centimeters (23.62 by 31.5 inches), 60 by 88 centimeters (23.62 by 34.66 inches), 66 by 96 centimeters (25.98 by 37.8 inches), 74 by 108 centimeters (29.1 by 42.52 inches), and 65 by 90 centimeters (25.6 by 35.43 inches); weight, 100 to 175 grams per square meter (3.53 to 6.2 ounces per 10.764 square feet); price, 88 to 90 lire ($16.98 to $17.37) per 100 kilos.

Wrapping paper: Grisetta, various forms and sizes, 16 to 24 lire ($3.09 to $4.632); bleu fino, various sizes, 28 to 30 lire ($5.404 to $5.79); bleu comune, various sizes, 20 to 24 lire ($3.86 to $4.63); cellulosa bleu, 100 by 150 centimeters (39.37 by 59.1 inches), 38 to 40 lire ($7.334 to $7.72); cellulosa naturale, 100 by 150 centimeters (39.37 by 59.1 inches), 36 to 38 lire ($6.948 to $7.334) per 100 kilos.

LEGHORN.

From Consul Benjamin F. Chase.

A great proportion of the paper used in this consular district is of Italian production. The coarser kinds of wrapping paper are produced in this district, chiefly in the Province of Lucca. Most of the paper used is obtained from factories near Florence and in Lombardy, Piedmont, and Venetia. In the importation of white paper for correspondence Great Britain leads, with France and Germany following. As most of the paper has the watermark and label on containers in English, it is difficult to identify the source of production, whether national or foreign.

The best qualities of paper and cardboard, especially paper for medium and high-grade social correspondence, of which dealers have large assortments at prices ranging from 2 to 10 lire ($0.39 to $1.93) per box of 50 to 100 sheets and envelopes are imported to a limited extent from Great Britain, Germany, France, Holland, Austria, and Norway.

The local agents and wholesalers handle the low-grade wrapping papers, such as are used by butchers, greengrocers, etc.; better qualities for druggists, bakers, confectioners, and general stores; and commercial correspondence paper (various grades), all of Italian production.

Stationers receive most of their supplies of blotting, tissue, social, and correspondence paper direct from Italian makers, through Florence and in the large cities of northern Italy. Commercial travelers, well provided with samples, call regularly on the local trade.

This condition makes it difficult for American exporters of paper to get established here for direct shipments. They had better get the agents in places now recognized as centers for paper and to which the local trade looks for supplies.

MILAN.

From Consul Nathaniel B. Stewart.

Milan is the most important commercial and manufacturing center in Italy, and is, therefore, the largest consumer of all classes of paper in the country. It has several important daily newspapers and other publications and many industries which require large quantities of printing and other cheap paper, while the business and social requirements call for large quantities of many classes and grades of paper.

Very little American paper is imported; but it is said that certain classes, as parchment, wax, carbon, ordinary board, and press or Bristol board, which are nearly all imported from Germany and England at present, would sell well here if the prices of the countries named could be met by the American exporters.

Wholesale prices are as follows: Heavy cardboard, ordinary, 18 to 30 lire ($3.47 to $5.79) per quintal (220.46 pounds); news paper, medium quality of pulp printing paper, in rolls, 31 to 37 lire ($5.98 to $7.14) per quintal; book printing paper, medium quality of pulp up to cellulose paper, 35 to 60 lire ($6.76 to $11.58) per quintal; writing and registry paper, 40 to 80 lire ($7.72 to $15.44) per quintal; note and letter paper, 56 to 100 lire ($10.81 to $19.30) per quintal; note and letter paper, very fine, 100 to 160 lire ($19.30 to $30.88) per quintal.

PALERMO.

From Consul Hernando de Soto.

There are no paper manufacturers in the consular district of Palermo. According to the principal wholesale dealer, about 95 per cent of paper of all kinds consumed in Palermo is supplied by Italian mills, and the remaining 5 per cent is received from Germany, Great Britain, and France, the latter country, however, sending almost insignificant quantities.

The high duty alone accounts for the fact that the Italian industry controls the paper market; otherwise the other European countries, especially Germany and Austria, would long ago have invaded the field.

In carbon paper, Great Britain practically controls the market, while Germany takes a small share of the trade in this commodity, although the German product is considerably cheaper than the English. From original invoices shown this consulate by the largest dealer in typewriter supplies, it appears that a manufacturer in Berlin, Germany, quotes carbon paper at 2.08 marks ($0.50) per 100 sheets for the first quality, and 1.06 marks ($0.25) per 100 sheets for the second quality, at factory Berlin, for orders of not less than 2,000 sheets. The German paper is wrapped in paper and not put up in boxes. A London firm offers similar paper for 3 shillings ($0.73).

The local dealers all agree that there is no market in this district for American medium or low-grade papers unless exceptional facilities regarding price and terms were offered, but they have expressed considerable interest in high-grade American writing, typewriting, carbon paper, and Bristol board. The largest dealer is willing to entertain offers from American manufacturers, and suggests that quotations be based on the following points:

Writing paper should be watermarked and be of a pure white, not grayish, color. Sizes wanted are in folded sheets measuring 27 by 42 centimeters (10.62 by 16.52 inches) and in flat sheets measuring 46 by 50 centimeters (18.1 by 19.68 inches). Weight should not exceed 50 grams (1¾ ounces) per square meter (10¾ square feet); prices to vary from 0.80 to 1.50 lire per kilo (7 to 12 cents per pound) c. i. f. Palermo.

Book paper should not exceed 28 lire per 100 kilos ($2.45 per 100 pounds) c. i. f. Palermo.

Bristol board in sheets measuring 50 by 57 centimeters (19.68 by 22.43 inches), weight 50 kilos (110 pounds) per 500 sheets, price not to exceed 45 lire per 100 kilos ($3.93 per 100 pounds) c. i. f. Palermo.

ROME.

From Consul Chapman Coleman.

In this city and consular district the kinds of paper used are approximately the same as in the United States. The writing paper in general use is, on an average, of inferior quality to the American article, and among the lower and middle classes ruled paper is largely used for correspondence. Rome is not a large publishing center, and the majority of books published in the district are Government publications. There are some 450 newspapers and periodicals published in this district, most of which have a limited circulation.

The market for American paper in this consular district would be extremely limited and probably confined to the high-grade papers. In recent years the sales of English-made, high-grade note paper have increased somewhat in the local market. The local market could best be supplied through a general agent situated elsewhere in one of the important commercial centers of Italy, as American exporters would probably find it unsatisfactory or unprofitable to attempt to deal direct with an agent in this city occupying himself exclusively with local sales.

GOVERNMENT SUPPLIES.

The Italian Government buys its supplies of paper for publications, office use, stamps, bank notes, etc., by public tender, when the quantities are sufficiently large. Contracts for paper supplies in less value than 8,000 lire ($1,544) are given by private orders.

The requirements subject to tender are divided into classes, so that as many establishments as possible are enabled to compete for each line. The purchasing department establishes a maximum price to be paid for paper of different kinds, and the tender which offers the largest discount on the fixed price and quality is accepted.

A printed document giving the rules and requirements for contractors for stationery supplies to one of the departments of the Italian Government is inclosed as a sample of the method to be employed for obtaining such contracts. It should be stated, however, that the award of such contracts is limited to cases where all printing and work is done in an establishment located in this country, to which establishment the Italian inspecting officers must at all times have access. It would therefore appear that foreign exporters are not eligible for competition in securing Italian Government contracts. The Government office charged with the purchase of stationery supplies is L'Economato Generale, Ministero di Agricultura, Industria e Commercio, Rome, Italy.

NETHERLANDS.

ROTTERDAM.

From Consul General S. Listoe.

Ever since the second half of the seventeenth century the paper industry has been an important one in the Netherlands, and even in those early days Dutch paper was celebrated all through Europe, not only on account of the purity of the material used but principally for its strong texture and uniform thickness.

In 1834 the first paper factory using motive power was erected at Zaandyk, and with only a few exceptions all the paper factories in the Netherlands are now equipped with machinery. The so-called "Old Dutch hand-scooped paper," the production of the old-fashioned mills, is all exported.

At present there are 34 paper mills in the Netherlands, employing about 3,177 laborers; 37 concerns manufacturing paper bags, with 753 laborers; 8 factories for sorting, cutting, and pressing of paper, with 152 laborers; 2 factories making artificial (paper) flowers and similar articles; and 1 factory with 12 laborers manufacturing articles of paper stucco.

As the factories do not publish any statistics of their output, no estimate can be given regarding the amount of paper used in the Netherlands, but, as will be seen from the import and export statistics, given in another place in this report, the amount of paper exported is four times as large as the quantity imported.

Besides the factories mentioned, there are in the thriving agricultural Province of Groningen, in the northern part of the Netherlands, 22 factories, employing 1,918 laborers, engaged in the manufacture of strawboard, box board, etc., of which articles also a large amount is exported.

The kinds of paper most in demand are: News paper at 0.11 to 0.13 florin (1 florin = $0.402) per kilo (2.2 pounds); better printing paper for cheap pamphlets, handbills, etc., which, however, still contains wood, costing from 0.12 to 0.20 florin per kilo. There is also quite a demand for woodless printing and writing paper, more especially in the qualities costing from 0.20 to 0.35 florin, and bank and letter paper (typewriting paper) in prices of 0.30 to 0.50 florin per kilo.

Generally speaking, the public wants cheap paper. Tub-sized bond has no demand, and the people are satisfied with good imitations.

Different kinds of wrapping paper are used to a large extent, but only in the cheap qualities from 0.07 to 0.20 florin per kilo. For the pasteboard-box industry and also for packing purposes the products of the mills in the northern part of the country are extensively used.

The following are the names, sizes, and prices of the different kinds of paper most in demand in the Netherlands. As wholesale prices could not be obtained, the prices given are those paid by dealers to the wholesale trade.

Names.	Dimensions.	Prices.[1]	Names.	Dimensions.	Prices.[1]
	Centimeters.[2]	*Florins.*[3]		*Centimeters.*[2]	*Florins.*[3]
Bykorf	37 by 47	1.25- 7.50	Dubbelroyal	59 by 92 64 by 98	8.55- 9.30 8.55- 9.30
Dubbelbykorf	47 by 72	2.50-12.15	Grootmediaan	46 by 60½	2.50- 8
Colombier	62 by 85	Unlimited.	Dubbelgrootmediaan	60½ by 92	5 -16
Coquille	44 by 56	2 -25	Kleinmediaan	41 by 54	2 -15.50
Dubbelcoquille	56 by 89	4 -50	Dubbelkleinmediaan	54 by 80 54 by 82	4 -30
Coquille post	44 by 56	2 -25	Olifants	60 by 75 62 by 77	Unlimited.
Dubbelpost	56 by 88	3.25-50	Schryf	34½ by 43	1 - 8
Octavo post	21 by 27	3 -20	Dubbelschryf	43 by 69	2 -16
Quarto post	27 by 43	3 -20			
Royal post	46 by 59	2.50-14.50			
Royal	48 by 64 50 by 65 51 by 62	2.50-14.50			

[1] All prices are per ream of 500 sheets. [2] 1 centimeter=0.3937 inch. [3] 1 florin=$0.402.

Since the paper is almost exclusively sold in reams of 500 sheets, should the weight per ream be too heavy, for instance, more than 20 kilos (1 kilo = 2.2 pounds), the paper is packed in half reams. Strawboard and similar paper weighing 40, 50, 60, and 70 kilos per 500 sheets, are generally packed in lots of 100 sheets.

Most of the raw material for paper manufacture is imported, the only available material being rags, paper waste, and strawboard pulp, made from straw grown in the Netherlands.

The wholesale price for white rags is about $6 to $8 per 100 kilos (220.46 pounds); for colored rags, about $3.20; and for mixed, $2.40 to $4 per 100 kilos. The price for straw pressed and delivered f. o. b. nearest deep water has varied during recent years between $6.40 and $8 per 1,000 kilos (2,204.6 pounds), according to kind.

The following tables show the quantities, in tons of 2,000 pounds, of raw material and paper, imported and exported during 1912 (official statistics for 1913 not yet being obtainable).

In the first table are shown the imports and exports of raw material during 1912:

Raw materials.	Quantity.	Raw materials.	Quantity.
IMPORTS.	*Tons.*	EXPORTS.	*Tons.*
Wood	340,201	Wood pulp	3,955
Wood pulp	32,787	Wood cellulose	46,314
Wood cellulose	84,544	Total	50,269
Rags and paper waste	57,449		
Total	514,981		

The imports of paper for consumption during 1912 are shown in the following table by classes:

Kinds of paper.	Quantity.	Kinds of paper.	Quantity.
	Tons.		*Tons.*
Printing paper, rolls, containing wood	13,436	Envelopes, separate	879
Wrapping paper	7,781	Silk paper	421
Note, book printing paper, woodless	6,253	Sanitary paper, rolls, etc	378
Wall paper	4,519	Note paper, with envelopes in one box or separate	363
Strawboard, pasteboard, etc	3,210	Paper bags, printed and blank	332
Asphalt paper	2,699	All other paper	4,658
Imitation parchment	1,825	Total	48,206
Parchment	417		
Chrome paper	1,035		

The general imports of paper in 1912, by countries, are shown below:

Countries.	Quantity.	Countries.	Quantity.
	Tons.		*Tons.*
Germany	169,351	Austria-Hungary	73
Belgium	22,315	France	43
Sweden	7,179	Spain	32
Norway	5,354	Dutch East Indies	22
Russia	5,055	All other countries	64
United Kingdom	4,667		
United States	440	Total	214,595

The exports of domestic production of paper in 1912, by classes, are shown in the following table:

Kinds of paper.	Quantity.	Kinds of paper.	Quantity.
	Tons.		*Tons.*
Strawboard	179,474	Office and writing books	118
Printing, writing, and drawing paper	17,605	Wall paper	100
Wrapping paper	8,660	All other paper	1,269
Pasteboard, cardboard, etc	7,542		
Envelopes	161	Total	214,929

A statement of the general exports of paper in 1912, by countries, follows:

Countries.	Quantity.	Countries.	Quantity.
	Tons.		*Tons.*
United Kingdom	220,086	British India	1,427
Germany	62,631	Spain	1,266
Belgium	48,043	France	1,221
Dutch East Indies	7,584	Portugal	906
Turkey	6,912	Norway	758
Brazil	4,310	Dutch Guiana	593
United States	4,096	Africa	327
Egypt	3,202	Cuba and other West Indies	232
Argentina	2,628	Russia	228
Greece	2,596	Colombia, Ecuador, and Venezuela	222
Australia	2,239	British Guiana	219
Denmark	2,137	Other countries	666
Italy	1,621		
Sweden	1,440	Total	377,580

The terms granted to importers of paper are as follows: Goods delivered c. i. f. port of destination cash payment (1 month) with a 2 per cent discount, or on three months' credit, net prices, without discount.

AMSTERDAM.

From Consul D. I. Murphy.

The paper supply of this consular district is largely drawn from domestic mills, of which there are about 45, including strawboard factories. Of these, 40 are in this jurisdiction, 2 new mills being in process of erection and nearly completed. All kinds of paper, except tissue, are made, about 4,500 workmen being employed in the industry.

American paper, conceded by the trade to be the best on the market, finds but limited sale, owing to its high price and the difficulty in getting orders filled within reasonable time. Several large dealers state that if they could get American paper at the same price as the domestic article or as cheap as German and Austrian paper they could build up a large trade. One extensive dealer expressed his willingness to pay even more for American paper because of its superiority over all others, but the prices are so much higher as to be practically prohibitive.

MARKET REQUIREMENTS.

There is no available information—nothing but the merest guesswork—as to the amount of each kind of paper made or used in this district. Paper for printing, especially news paper, is most in demand, that made from pulp having the largest sale and what is called "wood free" coming next. Strawboard, made in the Netherlands, is in very active demand, being only second in importance to news paper.

Smooth-finish white paper, in rolls of 300 kilos (the kilo being 2.2 pounds), is selling wholesale at 11 florins ($4.40) per 100 kilos, and in sheets of 500 at 11.75 florins ($4.70) per 100 kilos. White paper for books, pamphlets, magazines, etc., in packages of 500 sheets, costs at wholesale 19.50 florins ($7.80) per 100 kilos, the popular sizes being 60 by 92 centimeters and 55 by 80 centimeters (1 centimeter =0.3937 inch). Writing paper, for social purposes, white, smooth-finished, low and medium grades being most in demand—sizes 44½ by 56½ centimeters, 44 by 56 centimeters, and 46 by 58 centimeters—can be bought at almost any price. In the retail shops it is sold in boxes, 25 sheets of paper and 25 envelopes, as low as 10 cents, ranging to $1.10 and $1.25. In boxes of 50 sheets and 50 envelopes it sells at retail at from 15 cents to $1.50. For commercial correspondence, a white, smooth-finished paper of medium quality, 8 by 10¾ inches, is preferred. Carbon paper, black and violet, 8 by 10½ inches and 8 by 12½ inches, largely imported from England, sells wholesale at 9 florins ($3.60) per ream. Blotting paper—the American article being far better than any other in the market, average size of sheets 22½ by 17½ inches, but cut as dealers prefer—can be bought wholesale for 36 florins ($14.40) per 100 kilos.

Tissue paper is not made here, the supply coming from Sweden and Germany, white being most in demand. Cloth-lined, wax, and parchment papers are made here in small quantities, there being but little call for it and the demand diminishing. Straw paper for packing was formerly an important article of manufacture, but it has been replaced by other kinds, mainly manila and bogus manila. One large firm in this district has five large mills making wrapping papers. These papers are sold in rolls, 100, 120, and 140 centimeters long, weighing from 80 to 100 kilos. Only very cheap and common wall papers are made here, the medium and better qualities being imported from Germany and England. At retail rolls of wall paper are selling as low as 3 cents and as high as $1 and even higher.

The manufacture of strawboards has assumed very great importance in this district, the enormous quantities of straw produced in the agricultural regions and the cheap water transportation making the business exceedingly profitable. In all, there are about 20 factories with over 1,500 workmen engaged in this particular branch of the paper industry, the daily output being between 700 and 800 tons. The demand for strawboard, the usual size being 22 by 32 inches, but cut to any desired size for boxes, bookbinding, card mounting, etc., is enormous and constantly increasing. Box board, Bristol board, and press board are also made to a limited extent.

RAW MATERIAL.

While the raw material used in the making of straw paper is exclusively straw, that employed in paper making is rags, waste paper, straw, wood pulp, and cellulose. Next to news paper, strawboard is the most important article of export in the Netherlands paper industry, 90 per cent of the amount produced going to United Kingdom, Turkey, the United States, Canada, Brazil, Argentina, and Australia. About 7,000,000 florins represent the value of export of straw and cardboard per year ($2,800,000).

Rags, used in paper making, imported largely from England and Germany, cost from 100 to 200 florins ($40 to $80) per ton, and waste paper, much of it from England, sells at from 20 to 35 florins ($8 to $14) per ton. Wood for pulp, imported from Finland and Russia, sells at about 18 florins ($7.20) per ton, and wood pulp from Sweden, Norway, and Finland at about 23 and 26 florins ($9.20 to $10.40) per ton if moist and at double that price if dry. Chemically prepared wood pulp from Sweden, Norway, and Germany is worth from 85 to 100 florins ($34 to $40) per ton. There are no pulp mills in this district, the supply of domestic wood being exceedingly limited.

The usual terms here are three months net, or 30 days with 2 per cent discount; many English firms, however, allow a discount of 5 per cent on 30 days' payments.

The machinery in the paper mills in this region is mostly of German and Belgian make. There are no American paper machines employed, but special American inventions are used in connection with other machines. Men who attend the paper machines—engineers as they are called—and skilled laborers earn from 25 to 30 florins ($10 to $12) per week, while unskilled labor is paid considerably less; from 14 to 15 florins ($5.60 to $6) per week. Managers of mills get as high as 5,000 florins ($2,000) per annum. As a general thing labor is fairly efficient through the district.

NORWAY.

CHRISTIANIA.

From Consul General Charles A. Holder, Christiania.

The art of making paper, first from raw cotton and later from linen rags, was introduced into Europe, from China, in the ninth or tenth century, but it was not until the end of the seventeenth century that it was brought into Norway, the first paper mill having been built in 1698. In 1736 three additional mills were built, and in 1799 a fourth one at Bergen.

At first the industry was not a great success economically, although the state tried to favor it by placing import duties on paper, while rags were allowed free entry. At the beginning of the nineteenth century the total value of the production of the three factories at the Akers River, at Christiania, did not exceed $18,000, and not more than 100 men were employed. From 1802 to 1820 only four mills were built, and in 1865 only six of all the mills that had been constructed were in operation, with only 196 employees. The industry did not seem suited to Norway, for owing to a lack of raw materials, as the rags gathered here were insufficient, a great deal of material had to be imported. A change for the better occurred, however, in the middle of the last century, when a method of producing mechanical wood pulp and of using it as raw material for the manufacture of paper, was discovered, and in 1863 the first wood-pulp factory was built. The first factory for the production of chemical wood pulp was a sulphate cellulose factory, built in 1874, but chemical wood pulp was of no great importance until the sulphite method was used, first by the Skien Cellulose factory, in 1883.

At first all interest was centered in the wood-pulp industry, and the manufacture of paper in Norway was of little or no importance, as foreign paper factories absorbed the output. Later, as overproduction gradually became more common and larger and larger quantities of wood pulp and cellulose had to be sold at very low prices, Norwegian manufacturers determined to build their own cardboard and paper mills. The following table shows the years when various factories were built:

Years.	Wood-pulp factories.	Cellulose factories.	Paper and cardboard factories.
Before 1870	1	....	
1871-1880	25	1	4
1881-1890	26	9	8
1891-1900	10	5	4
1900-1909	7	6	13
Total	68	21	33

Eighty-four per cent of the wood-pulp factories, 86 per cent of the cellulose factories, and 69 per cent of the cardboard and paper factories are situated in country districts and the balance in cities. Among the Amts, Buskerud is best represented with 28 per cent of all wood-pulp factories, 38 per cent of the cellulose factories, and 40 per cent of the cardboard and paper factories.

Seventy-six per cent of these factories is owned by stock companies. Ownership in detail is as follows:

Factories.	Norwegian company or proprietor.	Foreign companies.	Norwegian stock companies.	Partly Norwegian stock companies.	Total.
Wood pulp	15	3	32	2	52
Cellulose	....	....	8	5	13
Cardboard and paper	1	....	10	4	15
Wood pulp and cellulose	....	1	....	....	1
Wood pulp, cardboard, and paper	4	1	6	2	13
Cellulose and paper	....	....	4	....	4
Wood pulp, cellulose, and paper	....	1	1	1	3
Total	20	6	61	14	102

Of the total factories, 80 per cent are in the hands of Norwegians, 6 per cent in the hands of foreigners, and 14 per cent in partly Norwegian hands.

The total appraised value, in 1909, of all wood-pulp, cellulose, cardboard, and paper mills in the country was $18,944,866, divided among the different groups as follows: Wood-pulp factories, $5,378,224; cellulose factories, $3,756,583; cardboard and paper factories, $1,920,488; wood-pulp and cellulose factories, $134,000; wood-pulp and paper factories, $3,819,991; cellulose and paper factories $1,228,780; wood-pulp, cellulose, and paper factories, $2,706,800.

RAW MATERIAL USED.

In the wood-pulp and cellulose factories the principal raw material used is, of course, timber. The total consumption in 1909 was 2,303,223 cubic meters, divided among the different groups as follows (cubic meter = 35.314 cubic feet): Wood-pulp factories, 980,100 cubic meters; cellulose factories, 877,773 cubic meters; combined wood-pulp and cellulose factories, 445,350 cubic meters; total, 2,303,223 cubic meters.

Another grouping shows consumption as follows: Mechanical wood pulp, 1,071,230 cubic meters; sulphite cellulose, 1,028,748 cubic meters; sulphate cellulose, 203,245 cubic meters; total, 2,303,223 cubic meters.

Pine trees, for the main part, were used by the wood-pulp and sulphite-cellulose factories, but as the sulphate-cellulose factories can use other kinds of timber as well, both fir and asp were also utilized. Not all the timber consumed was of Norwegian origin, for in 1909, 142,830 cubic meters were imported from Russia, of which some was used by match factories and for telegraph poles and the balance by the wood-pulp factories.

Thirteen sulphite factories, with a total production of 165,151 metric tons of dry cellulose, and 4 sulphate factories, with a production of 20,661 metric tons, used the following amounts of raw material, in metric tons:

Materials.	13 sulphite-cellulose factories.	4 sulphate-cellulose factories.	Total amount used.
	Met. tons.	*Met. tons.*	*Met. tons.*
Sulphur	7,591		7,591
Sulphur pyrites	33,674		33,674
Lime	3,511	630	4,141
Limestone	22,977	2,050	25,027
Salt		400	400
Sodium carbonate		40	40
Sodium sulphate		3,608	3,608
Total	67,753	6,728	74,481

Corresponding tables are lacking for two sulphite factories, with a total production of 20,596 metric tons of dry cellulose, and two sulphate factories, with a production of 11,947 metric tons of dry cellulose.

Cardboard and paper factories used as raw material 187,352 metric tons of moist mechanical wood pulp and 65,390 metric tons of dry chemical wood pulp. Besides these amounts, eight factories stated that they had used 2,579 metric tons of waste paper, and three factories used 990 metric tons of old rags. The main part of the mechanical wood pulp—85 per cent—was used by factories which were connected with wood-pulp and cellulose factories, while they also consumed 50 per cent of the chemical wood pulp. Of the 35 paper and cardboard factories in Norway, 5 used only mechanical wood pulp, 7 used only chemical wood pulp, and 23 used both mechanical and chemical wood pulp. Of the mechanical wood pulp used, 134,141 metric tons was moist white and 37,007 metric tons moist brown. Eight factories, with a total consumption of 16,204 tons of moist, could not give details. Of the chemical wood pulp, 27,116 metric tons was dry sulphite cellulose and 15,573 tons was dry sulphate cellulose. Fifteen factories, with a total consumption of 22,701 tons of dry, could not give details.

Information in reference to the consumption of glue and filling stuffs used is very defective, as only nine factories, with a total production of 81,231 metric tons of different kinds of paper, were able to furnish details. The consumption of these nine factories was: China clay (kaolin), 11,208 tons; resin, 1,512 tons; and alum, 355 tons.

PRODUCTION OF MECHANICAL WOOD PULP.

The total production of mechanical wood pulp in 1909 was 17,781 metric tons of dry and 673,615 tons of moist, or, regarding 1 ton of dry as equal to 2 tons of moist, a total of 709,177 tons. Of this total amount, 500,522 tons, or 71 per cent, were produced by factories for direct sale, and 208,655 tons, or 29 per cent, were used by factories for their own cardboard and paper production. The export of mechanical wood pulp in 1909 was 12,175 metric tons of dry and 445,574 tons of moist, or, regarding 1 ton of dry as equal to 2 of moist, a total of 469,924 tons. The production exceeded the home consumption and export by 51,901 metric tons of moist pulp, leaving this amount as stock on hand. Factories in the country produced 609,621 tons, or 86 per cent of the total, while factories in the cities produced only 14 per cent, or 99,556 tons.

The size of the factories may be judged from the following table:

Capacity of factories.	Number.	Production in tons.	Percentage of number.	Percentage of production.
Below 5,000 tons	27	80,576	39.7	11.3
5,000 to 10,000 tons	15	116,946	22.1	16.5
10,000 to 20,000 tons	18	263,740	26.4	37.2
20,000 to 30,000 tons	4	99,710	5.9	14.0
30,000 tons and over	4	148,205	5.9	21.0
Total	68	709,177	100.0	100.0

Sixty-two per cent of the wood-pulp factories were small plants, with a production of less than 10,000 tons of moist wood pulp, and they produced 28 per cent of the total mechanical wood pulp.

In the production of the mechanical wood pulp the following timber was used:

Timber.	Dry wood pulp.	Moist wood pulp.	Total estimated moist.	Percentage.
	Met. tons.	*Met. tons.*	*Met. tons.*	
Asp mass	3,714	2,478	9,906	1.4
Brown pine mass	7,406	37,863	52,665	7.4
White pine mass	6,661	633,284	646,606	91.2
Total	17,781	673,615	709.177	100.0

Thus the main part, 98.6 per cent, was pine mass while only 1.4 per cent was asp mass.

PRODUCTION OF CHEMICAL WOOD PULP OR CELLULOSE.

The total production in 1909 amounted to 184,970 metric tons of dry and 61,384 tons of moist chemical wood pulp, and regarding 2 tons of moist as equal to 1 ton of dry the total was 215,662 tons. Factories which sold their output produced 65.4 per cent, or 141,021 tons, while 34.6 per cent, or 74,641 tons, was produced by factories which used the cellulose in the manufacture of paper. Besides the consumption of cellulose by the latter the independent factories used 32,826 tons, so that in all 65,390 tons of dry cellulose were used in the paper industry. In the same year the export of cellulose amounted to 140,376 tons of dry and 3,750 tons of moist. The total production, expressed in tons dry weight, was utilized as follows: Used for paper production, 32,564; sold to independent manufacturers, 32,826; export of dry, 140,376; export of moist, equal to 1,875; total, 207,641.

The excess in production, 8,021 tons, was kept for stock. Factories situated in the country produced 188,656 tons, or 87.5 per cent of the total, while city factories produced 27,006 tons, or 12.5 per cent. Among the Amts, Buskerud and Smaalenene had the largest production with 40 and 37 per cent of the total production, respectively.

The following table shows the size of the various factories, in estimated dry metric tons:

Capacity of factories.	Number.	Production.	Percentage of number.	Percentage of production.
		Tons.		
Below 4,000 tons	2	2,113	9.5	1.0
4,000 to 8,000 tons	6	36,800	28.6	17.0
8,000 to 12,000 tons	8	80,236	38.1	37.2
12,000 to 16,000 tons	3	41,668	14.3	19.3
16,000 tons or more	2	54,845	9.5	25.5
Total	21	215,662	100.0	100.0

Fifty-two per cent of the factories produced less than 10,000 tons each, but only 30 per cent of the total quantity of cellulose was produced by them. The large factories, producing 10,000 tons or more, produced 70 per cent of the total. Of the total cellulose produced 15.1 per cent, or 32,608 tons of dry estimated, was sulphate cellulose. The main production, however, was sulphite cellulose, of which there were 183,054 tons of dry, equal to 84.9 per cent of the total produced. Of this production, 86 per cent came from Ostlandet (the east country), especially from the Amts of Smaalenene and Buskerud. Of the sulphite cellulose, 32.4 per cent, or 59,311 tons, was bleached, while the balance, 123,743 tons, was light bleached.

PRODUCTION OF PAPER AND CARDBOARD.

The total production of paper and cardboard in 1909 was 156,573 metric tons, of which 128,773 tons were exported. Imports amounted to 4,987 tons, so that the total consumption of cardboard in Norway amounted to 32,787 tons, or about 30 pounds for each person. Of the total production 74.9 per cent, or 117,240 tons, was produced by factories situated in the country, and 25.1 per cent, or 39,333 tons by city factories. The largest number of factories is in the Ostlandet (east of Norway), as 54.7 per cent of the total output was produced there, but the average per factory was much larger in the Sorlandet (southwest of Norway), as some of the largest paper factories are situated there. Among the different Amts, Buskerud and Bratsberg, with 60 per cent of the production, were most important. The capacity of the factories is shown by the following table:

Capacity of factories.	Number.	Production.	Percentage of number.	Percentage of production.
		Met. tons.		
Below 1,000 tons	6	4,056	17.1	2.6
1,000 to 2,500 tons	11	20,078	31.4	12.8
2,500 to 5,000 tons	8	23,805	22.9	15.2
5,000 to 10,000 tons	7	50,217	20.0	32.1
10,000 tons or more	3	58,417	8.6	37.3
Total	35	156,573	100.0	100.0

Thus almost 70 per cent of all the paper was produced by factories having a production of more than 5,000 tons, while less than 3 per cent was produced by the smallest group. Of the total production only 5.2 per cent, or 8,092 tons, was cardboard. Of the 148,481 tons of paper, 962 tons were writing paper, 54,119 tons wrapping paper, 75,410 tons printing paper, 2,320 tons tissue paper, and 998 tons were paper bags. Three factories, with a production of 14,762 tons, did not specify the kind of paper manufactured. Of 25 factories which stated their production 1 produced writing paper, 5 printing paper only, 15 wrapping paper only, 1 writing and printing paper, and 3 printing and wrapping paper. Nine factories produced 75,410 tons of printing paper, or 97.3 per cent of the total.

To recapitulate, the total production of wood pulp, cellulose, cardboard, and paper in 1909, was as follows:

Production.	Factories.	Quantity.	Value.
		Met. tons.	
White wood pulp	68	656,571	$6,377,300
Brown wood pulp		52,606	511,295
Sulphite cellulose	15	183,054	6,911,407
Sulphate cellulose	6	32,608	1,028,399
Printing paper	28	75,410	3,321,876
Wrapping paper		54,119	2,857,774
Other kinds of paper		18,952	1,070,614
Cardboard	7	8,092	335,965

INCOME OF FACTORIES.

During the past few years these industries have come into close combination with each other and many palnts now unite the manufacture of wood pulp with the manufacture of paper. In 1909, 9 factories were operating in connection with 1 other plant; 12 factories with 2 other plants; 8 with 3 other plants; and 1 with 5 other plants. Twenty-two were in connection with sawmills, 9 in connection with flour mills, 8 in connection with planing mills, 6 in connection with brick yards, 4 in connection with electrical works, and 13 were in connection with other plants such as machine shops, carpenter shops, etc.

In 1909 the gross incomes of the wood pulp, cellulose, and paper factories were as follows:

Factories.	Single plants.	Combined plants.	Total.
Mechanical wood pulp	$4,868,800	$2,019,796	$6,888,596
Chemical wood pulp	4,939,099	3,000,707	7,939,806
Cardboard and paper	2,082,148	5,504,081	7,586,229
Total	11,890,047	10,524,584	22,414.631

Fifty-three per cent of the total gross income was earned by single plants and 47 per cent by combined factories. Of the total gross income, 30.7 per cent represented mechanical wood pulp, 35.4 per cent chemical wood pulp, and 33.9 per cent cardboard and paper.

The average prices at which the wood-pulp factories sold their products, per metric ton, were as follows: Dry asp mass, $28.22; moist asp mass, $13.13; dry white pine mass, $22.31; moist white pine mass, $9.62; dry brown pine mass, $21.84; moist brown pine mass, $9.23.

The average prices at which the chemical wood-pulp factories sold their products, per metric ton, were as follows: Moist cellulose, bleached, $24.36; moist cellulose, unbleached, $16.46; dry sulphite cellulose, bleached, $46.14; dry sulphite cellulose, unbleached, $34.17; sulphate cellulose, $31.46.

Cardboard and paper production brought the following gross income: Writing paper, $142,147; printing paper, $3,321,876; wrapping paper, $2,857,774; other paper, $928,467; cardboard, $335,965; total, $7,586,229.

EXPORTS OF WOOD PULP.

The total export value of the three groups combined was $8,183 in 1866, and during the 45 years up to 1910 the amount increased to $16,595,444, or as 1 to 2,028. In 1870 the export value reached 100,000 kroner ($26,800); in 1876 it was more than 1,000,000 kroner ($268,000); in 1888 more than 10,000,000 kroner ($2,680,000); in 1897 more than 25,000,000 kroner ($6,700,000); in 1907 more than 50,000,000 ($13,400,000); and in 1911 more than 61,000,000 kroner ($16,348,000).

Countries importing the largest amounts of these materials were, in 1909, as follows (moist and dry reduced to moist wood pulp and dry cellulose):

9 3 3 3

Countries.	Wood pulp, moist.	Cellulose, dry.	Cardboard and paper.	Countries.	Wood pulp, moist.	Cellulose, dry.	Cardboard and paper.
	Met. tons.	*Met. tons.*	*Met. tons.*		*Met. tons.*	*Met. tons.*	*Met. tons.*
United Kingdom	282,043	55,807	89,483	Denmark	14,122	1,631	749
France	95,428	18,888	145	Germany	4,612	4,801	3,379
Belgium	45,279	6,863	893	Mexico	556	4,973	58
United States	754	35,034	5,412	Australia	....	435	6,201
Netherlands	18,461	3,728	2,920	China	....	....	6,815

In 1911 exports to the United States were 20,843 metric tons of moist wood pulp, 57,460 metric tons of dry cellulose, and 13,059 metric tons of cardboard and paper.

MACHINERY AND POWER USED.

Norway now manufactures all the machinery used in these industries. Paper-making machines were formerly imported, but during the last two or three years even these machines have been supplied by Norwegian factories. The first paper-making machine used in Norway was imported in 1830 and the first to be built here was made in 1860. The total number of paper machines in use in 1865 was 4, while in 1909 32 factories had 67 machines. In 1909 the combined cardboard and paper factories had 203 cylinder engines, and 5 cellulose factories had 25 bleach cylinder engines. In the same year 68 wood-pulp factories reported that they had 347 grinding machines, without stating, however, the number fitted for cold and warm grinding. On an average each wood-pulp factory had 5 machines and the average production per machine was 2,044 metric tons of moist pulp. All the wood-pulp factories were supplied with cardboard machinery, in all 787 machines, and 2 independent cardboard factories had 8 machines; a total of 795.

Twenty-two factories had brown wood boilers, for the production of brown pulp. Twenty factories had 115 cellulose boilers, with a total capacity of 11,130 cubic meters, while 1 factory, producing 9,000 metric tons of sulphite cellulose, gave no information. The average number of boilers per factory was 5¾. (A cubic meter is 35.314 cubic feet.)

The number of boilers at the sulphite cellulose factories was 93, with a capacity of 10,573 cubic meters, and the sulphate cellulose factories had 22, with a capacity of 557 cubic meters. Thus the average capacity and average annual production per boiler were, respectively, 114 cubic meters and 1,900 tons of dry-wood cellulose for the sulphite factories, and 25 cubic meters and 1,482 tons of dry cellulose for the sulphate factories

Water power furnishes the principal source of energy for this industry. This is shown by the following table, which gives the number of factories using different kinds of power: Fifty-eight use direct water power, 5 use steam, 5 use electricity, 14 water power and steam, 8 use water and steam and buy electric power, 3 use water power and buy electric power, 4 use steam and buy electric power, 2 use water and some other unstated power.

The total number of machines used was as follows: Five hundred and thirty-five turbines, generating 132,780 horsepower; 94 steam machines, generating 8,489 horsepower; 132 electric motors, generating 11,287 horsepower; 4 other machines, generating 58 horsepower; total, 765 machines, generating 152,614 horsepower. Besides these machines 10 other factories used turbines, generating 11,316 horsepower, without stating the number.

EMPLOYEES AND WAGES.

In 1865 there were only 202 employees in the combined industries—wood pulp, cellulose, cardboard, and paper. In 1879, 1,363; in 1890, 4,930; in 1900, 7,606; and in 1909, 12,205. In 1870 these employees amounted to 1 per cent of all factory employees in Norway; in 1880, to 4.2 per cent; in 1890, to 8.1 per cent; and in 1909, to 11.6 per cent.

In 1909 the total wages paid in the combined industries amounted to $3,245,186. Women receive from 1.50 to 3 kroner (40.2 to 80.4 cents) per day; men from 3.80 to 6 kroner ($1.018 to $1.608) per day. The average yearly wage paid employees was 992 kroner, or $265.85.

This report is based on an article on these industries, by Torleiv Tofdahl, published by Det Statistiske Centralbyraa, of Norway.

WOOD FLOUR PRICES.

An inquiry has been received in reference to the manufacture of wood pulp used in the manufacture of explosives, linoleum, and wall paper. The material manufactured in Norway for these purposes is called wood flour and not wood pulp. It is usually made of pine, from sawdust or small pieces of wood, by a process of grinding between grindstones until it becomes a fine powder. It is impossible to give exactly the amount produced each year, as no statistics have been collected by the Government, but in 1911 exports amounted to 9,947 metric tons, valued at $99,964, or $10.05 per ton. Not more than 5 per cent of the total production is used in Norway, so that the output for 1911 can be estimated at about 10,000 metric tons. During 1912 and the first seven months of 1913 production was less, as two mills no longer manufacture it, owing to the excessive cost of raw material compared to the selling price, notwithstanding a rise in price to $12.06 per metric ton.

The manager of one of the largest mills states that production in 1911 was about 10,000 metric tons and in 1912 about 7,000, and that it averages about 1,500 tons per mill. As there were seven mills in operation in 1911 and only five in 1912, these estimates agree with those already given.

Unless a further rise in price takes place it is doubtful whether production will increase to any extent, even though the American import duty be removed or decreased, as all mills are now working to their full capacity and have more orders than they can fill, not only from the United States but from Germany and Holland as well. It is possible that one of the two mills that ceased operating in 1912 may again start up, if prices become very high, but the difficulty all Norwegian mills experience is a lack of raw material at any except prohibitive prices.

Exports of wood flour to the United States were valued at $18,788 in 1911 and at $8,257 in 1912. A comparison of the exports thus far in 1913 would indicate that for the entire year they will amount to about $10,000.

BERGEN.

From Consul B. N. Rasmusen.

There is a growing demand for a standard grade of paper for official purposes with a view of securing durability and solidity in records and archives, as the practice hitherto obtaining in the various departments has not been uniform. This demand was strongly voiced in a recent article in one of the leading evening papers which concluded as follows:

> It has been generally known for some time that the paper used for official purposes is far from satisfactory as far as solidity and durability is concerned. Most of the documents prepared in the Government offices will sooner or later be placed in the public archives, and if the purpose shall be attained the paper must be of such quality that succeeding generations will be able to find readable documents a hundred years hence.
>
> In Denmark, Sweden, and Germany the law requires that paper used for official purposes shall be of standard grade, carefully tested and officially approved before it is used. A similar control has been proposed and urged for decades by the keepers of public records and archives, but the plan has been difficult to put into effect owing to the fact that Norway had no paper mills that could produce the grade required.

In order to meet the growing demand for a standard grade of paper for archival purposes, the Alvöen Papirfabrik of this city has made an effort to supply this demand and has placed upon the market a grade known as Normal Nos. 2, 3, and 4, which is calculated to fully comply with the strictest requirements for archival purposes.

The grade known as Normal No. 2 is made up in sheets 13.7 by 16.9 inches, weighing 16.5 pounds a ream, the retail list price of which is 22.50 kroner ($6.04) and the wholesale price 33⅓ per cent off list price. Normal No. 2 is specially designed for documents for archives calculated to last for an almost indefinite time.

Grade No. 3 is of equal size and weight but has less strength and is intended for protocols and records which are subject to less handling and consequent wear and tear. It is calculated to last a hundred years or more and cost 13.50 kroner ($3.61) per ream in retail, the wholesale price being one-third off list.

Normal No. 4 is made up same size as Nos. 2 and 3, but of lighter quality and less durability, but calculated to be suited for legal documents and protocols where durability is of less importance; it weighs a pound less to the ream and retails for 8.40 kroner ($2.25), the discount being the same as the foregoing grades.

POSSIBLE MARKET FOR AMERICAN PRODUCTS.

The typewriter has come into general use in this district quite recently, during the last 10 years, and this has resulted in a gradual change in methods and materials employed in general office work. In order to emphasize this fact more fully quotation is made from a former report relative to the typewriter market, which stated as follows:

> The typewriter market seems to be pretty well supplied at the present time and the sale of machines has increased tremendously in recent years, yet as near as can

be ascertained not to exceed 40 per cent of such business firms as will in all probability eventually make use of typewriters have been supplied.

The first investigation made by the writer relative to finding a market for typewriting machines was made in an adjoining district some 10 years ago, and at that time there were very few machines to be found here, and those that had them made very little use of them. The reason assigned for this was that the clerks were used to longhand writing and dreaded to make the change. The change from old-time methods will be more pronounced in the immediate future than heretofore; institutions preparing young men and young women for business careers include stenography and typewriting in their course of study, and the future office man or office woman will introduce such methods wherever employed.

There are many different types of typewriters sold in this market, but only the leading American brands are known as good sellers. There are German machines sold here also, but these affect the sale of American machines very little, being considerably cheaper in price and consequently of inferior grade.

A corresponding increase in the use of typewriter and carbon papers is the natural result, and it is reasonable to conclude that in a district where scarcely any but American machines are in use, the paper and supplies needed for this purpose would naturally be obtained from the same source if convenient for the purchasers and if proper efforts were made by the manufacturers to supply such market.

It is obvious that there is little chance here for a market for board or wrapping papers, articles that Norway exports in large quantities, nor is there any prospect for a market for the cheaper grades of writing paper, as the trade is well supplied by the domestic product. There are, however, certain classes of paper imported for which American manufacturers could make a strong bid, and these include blotting, tissue, toilet, and the better grades of document, typewriter, and writing papers.

The paper used in this district is largely of domestic manufacture, but there are certain classes of which the import is considerable. Thus in the year 1912 there were imported 69,577 pounds of writing paper, 154,014 pounds of printing, 176,525 pounds of wrapping and board, 109,150 pounds of tapestry and wall, and of other papers classified in import statistics as building and roofing, 788,814 pounds.

The exports from this district for the same period consisted almost exclusively of board papers, 1,928,955 pounds, with the single exception of 140,000 pounds of wrapping paper.

In imports Germany takes the lead in printing, writing, wrapping, and board papers, and Great Britain, which ranks second in paper imports, supplies considerable quantities of building, printing, and wrapping paper. The United States furnishes board, building, envelopes, printing, pattern, and wall paper.

MARKET REQUIREMENTS.

The domestic manufacture of writing paper is confined largely to the cheaper grades of note and letter sizes sold by stationers in the cities and kept for sale at general stores throughout the country, the retail price of which ranges from 2.65 kroner ($0.71) per ream for note size and 4.50 kroner ($1.20) for letter size to 5 kroner ($1.34) and 11 kroner ($2.95) per ream, respectively. The better grades of writing paper used for business and social correspondence, which retail in the local market from 9.50 to 20 kroner ($2.55 to $5.36), are of various tints and have better finish. They are principally imported from Germany.

The market for blotting paper is supplied from Great Britain principally. The domestic manufacture is so small that it is hardly worth mentioning and the imports from Germany are insignificant. The size of sheets imported from Great Britain is 17.5 by 22.5 inches, wholesale price from 15 kroner ($4.02) to 55 kroner ($14.74) per ream, retailing at 23 kroner ($6.16) to 84 kroner ($22.51) per ream, prices which are considered expensive and naturally restrict its use.

Canning factories use large quantities of tissue paper for packing tins, and it is also used for packing fruit, cheese, and vegetables. Considerable of the supply used here is manufactured in Norway and some is imported from Sweden, but the bulk of this class of paper is imported from Great Britain. The wholesale price of the domestic product is 2.10 kroner ($0.5628) per ream of sheets 20 by 30 inches, and the retail price 3.50 kroner ($0.938), while the English grades cost 4.30 and 5 kroner, ($1.15 and $1.34) respectively, in wholesale, and retail at 7 and 8 kroner ($1.876 and $2.144), respectively.

The domestic manufacture of toilet papers is confined to the cheaper grades, which cost the dealers 10.80 kroner ($2.89) per case of 100 rolls and retail for 15 kroner, or 4 cents per roll. A better grade called "Sanitar" costs the dealers 16 kroner ($4.28) and retails for 24 kroner, or 6.43 cents per roll. The German "Excelsior" and the British No. 3 constitute the better grades used, the former costing wholesale 4.64 cents per roll and retailing at 7.1 cents, and the latter costing 9.38 and retailing for 12.5 cents per roll.

German and English manufacturers grant terms of 90 days net and 2½ per cent off for cash in 30 days; the present rate of bank reimbursement for cash is 5 per cent.

PAPER MANUFACTURE AT BERGEN.

The Alvöen Papirfabrik and the Sevareid Papfabrik are located near the city of Bergen, though outside of the city corporation, and are classed as one of the most important local industries. Both factories are owned and operated by the same parties, but the difference in the names is due to the fact that the Papfabrik (paper board factory) was established several years ago and had a well-known trade-mark before the Papirfabrik was started.

The machinery used in the Papirfabrik is of German and English make, while the Papfabrik is equipped almost entirely with American machinery. Raw materials for paper manufacture are not available in this district or in western Norway, but eastern Norway has vast forests from which the supply is derived and the freight is low, making it possible to import raw products from one section of the country in order to utilize cheap power in another. The average pay of labor in all paper mills in Norway is 37 öre ($0.0991) per hour.

CURRENT PRICES OF WRITING PAPER.

The following table gives the current prices of writing paper at the factory of the Alvöen Papirfabrik, Bergen, Norway:

Writing papers.	Kroner per ream.	United States equivalent.
Billetpost:		
Løve (note)	4.50	$1.20
Victoria	4.20	1.125
Forglemmigei	3.30	.884
Emilie	3.00	.804
1524	3.00	.804
150	2.25	.60
A	2.40	.643
Oktavopost:		
Union	4.20	1.125
Norskpost	3.50	.938
Ankerpost	3.50	.938
Stjerne	3.50	.938
Konkurrent	2.65	.71
Rival	3.15	.844
Universal	3.15	.844
F 3	1.70	.45
F 3½	2.00	.536
F 4	2.25	.60
F 5	2.85	.763
1604	2.85	.763
1605	3.50	.938
304½	1.80	.482
304	2.00	.536
Kvartopost:		
Bank No. 1, 6¼ gr	8.10	2.17
Bank No. 1, 8	9.90	2.65
Bank No. 1, 9	11.10	2.97
Bank No. 3, 7½	4.80	1.28
Bank No. 3, 9	5.70	1.52

Writing papers.	Kroner per ream.	United States equivalent.
Kvartopost—Continued.		
Bank, extra sterk	11.80	$3.16
Bank, "Thor"	8.40	2.25
No. 96 rf., 6¼ gr	6.40	1.71
No. 96, rf., 8 gr	7.80	2.09
Commercial, 8 lined	6.80	1.82
Commercial, 10 lined	8.40	2.25
Commercial, 12 lined	10.00	2.68
Norskpost, glat (smooth)	7.00	1.80
Norskpost, glat, S. H	7.00	1.80
Norskpost, dull	7.00	1.80
Norskpost, bluish (lined), ruled	7.00	1.80
Anker, ruled	7.00	1.80
Stjerne, ruled	7.00	1.80
Konkurrent, ruled	5.25	1.40
Rival, ruled	6.30	1.68
Universal	6.30	1.68
1608, ruled	5.70	1.52
1610, ruled	7.00	1.80
1610, checked, ruled	7.50	2.01
No. 4, ruled	4.50	1.20
No. 5, ruled	5.70	1.52
Billetpost, Repp	3.75	1.00
Oktavopost, Repp	4.20	1.12
Kvartopost, Repp	8.40	2.25
Billetpost, cloth lined (lined)	3.75	1.00
Oktavopost, cloth lined, ruled	4.20	1.12
Kvartopost, cloth lined, ruled	8.55	2.28
Postplano, bluish, 9 kg	10.80	2.89

CURRENT PRICES OF WRAPPING PAPER.

The following prices are net f. o. b. Christiania or Drammen, except in the case of cellulose or kraft paper (*c*), for which quality to both dealers and consumers the prices are c. i. f. when shipments are made direct from factory:

Classes of wrapping paper.		Price to dealers.	Price to consumers.
(*a*) "Naturelt":		*Cents.*	*Cents.*
500 kilos (1,102 pounds), minimum	per pound	2.49	2.86
Less than 500 kilos	do	2.61	2.98
(*b*) "Naturelt," smooth finish:			
500 kilos, minimum	do	2.19	2.55
Less than 500 kilos	do	2.31	2.67
(*c*) Cellulose and kraft paper:			
500 kilos, minimum	do	3.40	3.89
Less than 500 kilos	do	3.52	4.14
(*c*) Cellulose (e. g., Brager, Norw. Paper Co. "Sovereign" Jarlsberg):			
500 kilos, minimum	do	3.04	3.40
Less than 500 kilos	do	3.16	3.65
(*c*) Cellulose (seconds), minimum price	do	3.04	3.40
(*d*) Manila (e. g., from Borregaard, bohnsdalen, Drammenelvens paper factories):			
500 kilos, minimum	per pound	3.04	3.40
Less than 500 kilos	do	3.16	3.65
(*e*) Manila, imitation (e. g., Brager, Norw. Paper Co. and Jarlsberg):			
500 kilos, minimum	do	2.67	3.04
Less than 500 kilos	do	2.80	3.28

Classes of wrapping paper.	Price to dealers.	Price to consumers.
(f) "Satin," white, smooth sulphite paper. Same price as for manila (a).		
(g) Mackled sheets, white, 33 by 39 and 20 cm. rolls; 40 cm. rolls double price:	*Cents.*	*Cents.*
Minimum, 250 reams (1 ream, 500 sheets)........per ream..	12.30	....
Less than 250 reams........do....	12.90	....
Minimum of 100 reams........do....	....	13.90
Less than 100 reams........do....	....	14.70
Minimum of 100 rolls........per roll..	12.30	13.90
Less than 100 rolls........do....	12.90	14.70
(g) Satin, white, mackled, sheets 33 by 39 cm.:		
Minimum of 250 reams........per ream..	15.50	16.60
Less than 250 reams........do....	16.10	17.20
(h) Grease proof, seconds:		
Minimum of 500 and 250 kilos, respectively........per pound..	3.52	3.89
Less than minimum........do....	3.65	4.26
(i) "Pergamyn" (waxed), Norw. imitation:		
In sheets (40-70 gr.)........do....	5.23	5.95
Minimum of 500 and 250 kilos, respectively........do....	4.98	5.71
Less than minimum........do....	5.23	5.95
(i) Same as above, except in rolls:		
Minimum of 500 and 250 kilos, respectively........do....	5.23	5.95
Less than minimum........do....	5.47	6.20
(k) "Pergamyn" (extra quality), 40 to 70 gr.:		
Minimum of 500 and 250 kilos, respectively........do....	5.59	6.20
Less than minimum........do....	5.83	6.45
(k) "Pergamyn," same, in rolls:		
Minimum of 500 and 250 kilos, respectively........do....	5.83	6.45
Less than minimum........do....	6.08	6.81

For "consumers" purchasing in minimum shipments of 2,000 kg. (4,409 lbs.) of one quality of paper, or 1,000 kg. (2,204.6 lbs.) in the case of grease proof or "Pergamyn" (wax) paper, the prices are the same as to "dealers," and a list of such consumers is kept by the wholesale dealers.

The foregoing price list applies only to quantities of 100 kilograms (220 lbs.) or more and all prices are net. Terms are four months' acceptance, cash in 30 days, 2½ per cent trade discount.

The proximity of European firms and the facilities for promptly filling orders gives them considerable advantage, but since the establishment of the new Norwegian-American steamship lines whereby goods from New York will reach Bergen in eight to nine days, there is a noticeable increase in trade inquiries from exporters in both countries. If American manufacturers desire to compete for this market in articles that are manufactured in European countries it stands to reason that they will have to adopt the same aggressive trade methods that are in vogue here, that they must necessarily arrange for competent representation, either by traveling salesmen or by competent general agents in commercial centers. As far as western Norway is concerned, Bergen would be the natural distributing point, being the first port of call for the Norwegian-American Line, but if representation for the whole country is centralized, then the city of Christiania is the logical distributing point.

STAVANGER.

From Consul Walter A. Leonard.

The predominance of German-made goods in the paper imports is attributed by local dealers chiefly to the personal attention given by the German salesmen to this territory, followed up by prompt deliveries in any quantity to suit the purchaser. The cheap and efficient parcel post between Germany and Norway saves the necessity of much packing and enables small rush orders to be filled within a few days.

MARKET REQUIREMENTS.

The city of Stavanger has a population of 40,000, and its hinterland has an additional 100,000. It is believed the demand for papers of all kinds corresponds quite favorably with a like-sized community in the United States; the average demand, however, being for cheaper grades. That considerable business stationery is in use would be evidenced by the 300 typewriters of this district. Business letters are invariably put into envelopes more nearly square than the ones used in the United States, permitting the letter sheets being folded only once from the side, the same as from the bottom.

Excepting a limited amount of writing, typewriter, and carbon papers, local dealers are unacquainted with American paper products. The excellent quality is conceded and prices are sufficiently reasonable to enable successful competition. But Stavanger dealers have not been called on by salesmen representing American papers, and until this method of placing the goods before them is used, it is not believed much business can be done. It may be a trite statement, but however superior the quality and reasonable the prices German competition can not otherwise be met successfully. It is the convenience offered by the German houses to the Norwegian trade which make them irresistible. The consul has had the pleasure of meeting several of these German salesmen who call in Stavanger regularly; they speak the language of the country, meet the market requirements, and sell the goods because they make it pleasant and easy for dealers to buy. American hardware is an instance of how goods can be introduced in Stavanger and a good trade built up principally through representation from Hamburg. .The same could be done with American paper goods, although representation in Christiania might be preferable. The largest local paper dealer expressed as his opinion that especially in the stationery line should the United States have a large trade in the Scandinavian countries, and a representative appointed to personally call on the trade could work up a good business. The recently inaugurated direct steamship service between United States ports and Norway has already encouraged a greater effort on the part of American manufacturers to enter the Scandinavian market directly.

PORTUGAL.

From Consul General W. L. Lowrie, Lisbon.

High-grade American-made paper of all kinds would find an excellent market in Portugal, provided that prices and terms of sale are such as will meet the competition of foreign manufacturers. The local production of paper does not exceed 10,000 tons a year and the balance of the amount necessary to supply the demand of the country is imported. Local dealers assert that the market is open to anyone in position to meet competition. Every variety of print, book, and writing paper is used in Portugal, one of the local factories producing 137 different kinds. The style, weight, and finish of the French, English, German, Spanish, Swedish, and Swiss papers on sale in the stationery stores and used by printers and publishers are such as might be found in any large city.

As the United States has a commercial treaty providing for "most-favored nation" treatment, the only advantages which continental manufacturers have over American are lower freight rates, from

25 to 50 per cent from France or England, and proximity to the market. The domestic product is mostly of a low grade, and it is almost impossible for foreign concerns to compete for this business owing to the high customs tariff. But the better quality of paper is supplied by the foreign manufacturers. The market is visited by traveling salesmen carrying samples. Stocks on hand are generally small, and printers and publishers are compelled to wait, at great inconvenience, for the delivery of their orders. It has been suggested by several of the parties interested that if the American manufacturers are willing to establish a warehouse for the sale of paper and cardboard and strawboard in large quantities they would have an excellent chance to secure an important share of the business. The Portuguese islands could also be supplied.

The silk paper in which port-wine bottles are wrapped is all imported.

Raw material for the production of paper is furnished by the *Pinus pinaster*, which grows in all parts of the country to an altitude of 3,700 feet. This tree attains a height of 120 feet and a diameter of 6 feet. It is employed for lumber, railroad ties, and paper pulp. Rags are imported in large quantities from Germany, Belgium, Norway, and Sweden. The importations of paper pulp of all qualities and conditions in 1911 and 1912, and the declared valuations, were as follows: 1911, 16,617,317 pounds, value $300,912; 1912, 19,754,860 pounds, value $332,969.

There are two pulp mills in Portugal, but the output is of rather low grade and most of it is exported. The Caima Timber Estate & Wood Pulp Co. (Ltd.), of London, produces 3,000 tons annually. The factory is equipped with modern machinery.

Labor is not efficient and the wages paid are comparatively low. Ordinary workmen receive from 50 to 70 cents a day and foremen from 80 cents to $1. The equipment for the mills comes from Scotland and Germany.

The quantities and values of paper exported in 1911 and 1912 were as follows:

Kinds.	1911		1912	
	Pounds.	Value.	Pounds.	Value.
Writing	203,154	$20,064	210,955	$21,004
Painted	2,466	275	1,392	107
Not specified	238,120	9,912	264,375	13,364

The exportation according to countries in 1911 (the latest available statistics) was as follows:

	Pounds.
Writing paper:	
Germany	1,420
Ecuador	9
Brazil	4,539
United Kingdom	213
Uruguay	13
Portuguese colonies	196,960
Painted paper:	
Germany	705
Spain	6
Brazil	782
France	176
Painted paper—Continued.	
United Kingdom	22
Portuguese colonies	775
Paper not specified:	
Germany	22
Egypt	8
Ecuador	26
Brazil	14,271
France	138
Netherlands	187
Italy	33
Portuguese colonies	223,435

Importations of paper of all kinds in 1911 and 1912, with the values, were as follows:

Kinds.	1911		1912	
	Pounds.	Value.	Pounds.	Value.
Print	2,527,351	$68,352	2,269,124	$65,182
Albuminous	2,662	345	2,762	309
Lithograph (couché)	612,377	35,087	668,891	40,233
Photographic (sensitive)	42,407	19,172	58,356	22,028
Writing, colored or white, in any state	276,954	50,041	272,698	51,619
Painted or stamped by any process	214,698	34,733	205,791	34,028
Not specified	1,669,256	216,100	1,728,780	217,735
Envelopes and paper bags	113,116	27,512	111,229	27,786
Cardboard	700,489	43,996	753,215	49,879
Pasteboard	2,469,106	41,749	2,627,749	48,244
Cardboard cut for tickets or photos and similar uses	106,698	56,675	106,601	56,003
Cardboard and pasteboard in process of manufacture, except binding	360,336	56,496	443,020	71,745
Printed paper, letterheads, envelopes, etc	92,364	93,081	118,460	187,878

Importation from the various countries in 1911 (the latest available statistics) was as follows:

	Pounds.
Writing paper, white or colored:	
Germany	95,495
Austria	11,377
Belgium	37,934
Spain	526
United States	134
France	17,089
Netherlands	44,471
United Kingdom	51,466
Italy	17,718
Sweden	529
Sources not mentioned	209
Common print paper:	
Germany	1,849,790
Belgium	57,760
United States	9,285
France	160
Netherlands	325,343
Sweden	99,159
United Kingdom	37,647
Norway	119,202
Switzerland	13,033
Sources not mentioned	15,972
Albuminous paper:	
France	68
England	2,599
Lithographic paper (couché):	
Germany	570,309
Austria	3,604
Belgium	6,751
United States	15
France	35
Netherlands	13,446
United Kingdom	17,635
Italy	582
Photographic paper:	
Germany	11,156
Austria	4
Belgium	887
United Kingdom	21,642
Spain	61
France	8,113
Netherlands	22

	Pounds.
Photographic paper—contd.	
Switzerland	114
Sources not mentioned	408
Painted or stamped paper:	
Germany	82,194
Austria	2,581
Belgium	18,026
Spain	1,169
United States	537
France	48,050
Netherlands	20,393
United Kingdom	41,218
Italy	11
Japan	59
Russia	108
Switzerland	2
Sources not mentioned	350
Paper not specified:	
Germany	703,317
Austria	75,222
Belgium	134,599
Spain	146,920
United States	11,003
France	275,382
Netherlands	89,131
United Kingdom	173,370
Italy	1,981
Japan	568
Norway	11,773
Russia	3,132
Sweden	13,054
Switzerland	5,506
Portuguese colonies (Angola)	2
Sources not specified	24,295
Paper not specified in customs tariff:	
Germany	1,192
Belgium	132
Spain	4
France	566
United Kingdom	718
Japan	105
Sources not specified	11

There is a good market for wall paper in Portugal. The imported paper is of a high quality and retails for 35 cents to $1 a roll. The native wall paper is of poor quality and sells as low as 10 cents a roll. The styles include plain and figured paper, the local taste tending toward rather high colors.

The high-grade writing paper retails at 75 cents to $1.50 a box.

Shipping facilities between the United States and Portugal are furnished by the following direct lines of steamers: Faber Line, Gans Line, Creole Line. Shipments may also be made via England, Germany, France, or Spain. These should be forwarded with the usual transshipment documents.

All paper used by the Government of Portugal is purchased by the Imprensa Nacional (Government printing office), Rua da Escola Polytechnica. Bids for supplies as required are invited by advertisements in the official publication.

RUSSIA.

MOSCOW.

From Vice Consul General A. W. Smith.

There is a large market for paper of all classes in Russia, the consumption of which is progressing at a rapid rate. As the home production of paper is not sufficient to meet the requirements of the country, a great part of the supply is imported from other countries, and statistical data show that the imports of paper and paper manufactures for the last 20 years or so have increased 650 per cent.

The chief source of the imports is Finland, where the paper industry has attained a great development. The abundance of forests, cheap water power, and superior kind of labor are factors that have promoted this industry in Finland, against which the Russian paper mills find it very difficult to compete.

In 1913 a project was drawn up by the Government to abolish the customs regulations in regard to Finland, so that this country should form part of the Empire on equal terms with the other Provinces in regard to imports and exports. Russian manufacturers very decidedly expressed their dissatisfaction with this plan, the paper manufacturers declaring that the abolition of the now existing duty on Finnish paper imports would ruin the Russian industry, as they would be unable to compete with Finnish paper.

It is impossible to give the exact figures regarding the amount of each kind of paper used in Russia. The various grades of paper required by the Russian market are practically the same as used in the United States. The Russian manufacturers turn out a great variety of quality and design, but, as a rule, their products are inferior to those of foreign manufacturers, with the exception of news paper, which is supposed to be superior to that manufactured in Germany and Austria.

KINDS OF PAPER USED.

Wrapping paper is made principally of wood pulp in varieties of gray and brown color. As a rule, it is not very strong, the provincial dealers using such inferior paper in their stores that the paper bags often burst before the purchases are brought home. People buying large quantities of flour or sugar always insist on receiving them in cotton bags. A special kind of wrapping paper is called "sugar paper"; it is thick, of dark-blue color, rather similar to blotting paper in appearance, and is used for wrapping the refined sugar coming from the mills.

Wall paper is produced extensively in Russia. There are about 30 mills engaged in the manufacture of wall paper, which is sold by pieces, each piece usually equaling 15 arshins (about 11.5 yards), with the exception of superior grades, which are manufactured in greater lengths. The cheapest wall paper is sold at 10 to 12 kopecks (5 to 6 cents) per piece, this kind being manufactured in light colors only. The prices go up until they reach 75 rubles a piece ($38.62 per piece of 11.5 yards). Wall paper of foreign make is sometimes sold at 250 rubles ($128.75) per piece. Most of the wall-paper mills are situated in the Province of Moscow.

Writing paper is sold in reams of 480 sheets, the price depending on the quality, size, and weight. The superior grades are of pure white color, while the cheaper kinds have a yellow tint. The size 14 by 17½ inches, weighing 8 pounds (7.2 avoirdupois pounds) per ream, is sold at a price varying from 1.25 to 8.75 rubles per pood ($0.64 to $4.51 per 36.11 pounds). Other sizes are 15 by 18 inches, 14½ by 17½ inches, 17½ by 29½ inches, and 18 by 29¾ inches.

Book paper is sold in reams of 480 sheets, the size of sheets varying from 14 by 17½ inches to 26½ by 34½ inches. The weight of the ream varies from 16 to 84 Russian pounds (Russian pound = 0.9028 avoirdupois pound), and the price from 3.65 to 19.50 rubles ($1.88 to $10.04).

Tissue paper (cigarette paper) is sold in sheets and rolls. The weight varies from 10 grams per square meter (0.3527 ounce per 10.76 square feet).

Note paper (letter paper) is sold in reams weighing 7 to 28 Russian pounds, the price varying from 1.95 to 12.90 rubles per ream ($1.04 to $6.64 per 480 sheets). Best note paper is sold in boxes containing 25 or 50 sheets, with envelopes, and varies in price according to style and finish. Very high prices, as much as 14 rubles ($7.21) per box of 50 sheets and envelopes, are paid for foreign note paper of artistic designs, hand painted, etc. The Russian mills generally place their superior note paper on the market in boxes with English names printed on them.

Parchment paper is manufactured in various grades. Yellow parchment for wrapping leather is sold in reams of 480 sheets, the ream weighing 50 Russian pounds (45.13 avoirdupois pounds), at 12.50 rubles per ream ($6.43 per 480 sheets). Thinner parchment paper is extensively used for wrapping butter, etc., and is sold in reams of 480 sheets, the ream weighing from 5 to 25 pounds (4.5 to 22.5 avoirdupois pounds), at prices varying from 2 to 6.25 rubles ($1.03 to $3.22) per ream. A superior kind is sold in reams of 500 sheets, weighing from 22 to 32 Russian pounds (19.9 to 28.9 avoirdupois pounds), at 6.60 to 9.60 rubles ($3.39 to $4.94) per ream.

Envelope paper is sold in reams of 480 and 500 sheets, the weight of the ream varying from 24 to 78 Russian pounds, the price from 4.35 to 11.70 rubles ($2.24 to $6.02) per ream. It is manufactured in white, yellow, gray, and blue colors.

Blotting paper is sold in reams of 480 sheets, weighing from 20 to 160 Russian pounds (18 to 144 avoirdupois pounds), at prices varying from 4.20 to 34 rubles ($2.16 to $17.05) per ream. It is manufactured in all colors.

The best drawing paper is imported from England. Russian mills manufacture the drawing paper in reams weighing from 6 to 140 Russian pounds (5.4 to 125 avoirdupois pounds), at prices varying from 2 to 28.70 rubles ($1.03 to $14.78) per ream.

Bristol board is sold in sheets 48 by 64 centimeters (19½ by 25½ inches, at 29.50 to 87 rubles ($15.19 to $44.08) per ream.

Photograph board is manufactured in sheets 20 by 28 inches and is sold at 43 to 120 rubles ($22.14 to $61.08) per ream.

Handmade linen paper is used for documents, shares, coupons, etc., and is made to order for notaries and firms, with special watermarks according to order. The price varies from 5.85 to 33.30 rubles ($3.01 to $17.14) per ream.

All the foregoing prices are subject to a discount of 10 to 15 per cent.

PRODUCTION OF PAPER IN RUSSIA.

The first attempts in manufacturing paper in Russia were made as early as the sixteenth century, but the regular production of this article dates from 1716, when the first paper mill was established at Duderhof, under Peter the Great. At the present time there are about 410 mills in the Empire.

In 1890 the total amount of paper manufactured in Russia represented the value of $9,826,715; in 1900 it reached $20,456,315; in 1908, $25,492,500; and in 1911, $29,612,500. This quantity is far from sufficient to meet the requirements of the country, and the imports of paper and paper manufactures are continually increasing. In 1890 the imports amounted to $1,662,420; in 1900 this figure had risen to $4,813,705, and kept growing until it amounted to $13,725,323 in 1912 and $16,778,700 in 1913. This proves that the consumption of paper grows at a more rapid rate than its production in the country. During the period 1890–1911, the consumption increased 260 per cent, the production 200 per cent, while the imports show an increase of 650 per cent.

MATERIAL USED FOR MANUFACTURING THE BEST PAPER.

The best paper is manufactured of linen rags, which are mostly supplied by the Provinces of Kursk, Orel, Penza, Tchernigov, Kharkof Poltava, Voronezh, etc. In view of the limited home supply of rags, the imports of this article from foreign countries are exempt from paying any duty if they are destined for the manufacture of paper. Cotton rags are also used, but the paper produced from them is not as durable as that made of linen, and in most mills cotton rags are used as an addition to the linen material.

The chief substitute for rags is wood pulp and cellulose. but in spite of the enormous timber supplies of Russia, the production of this raw material has not reached the development that would allow the paper mills to extend their production, and they are still dependent on foreign countries for part of their raw material.

Wall paper, packing paper, and the medium and low grades of paper are made from wood pulp and cellulose, while the superior grades of paper, writing, tissue paper, etc., are manufactured from linen rags. Packing paper is also produced from straw pulp.

The following figures, which represent production in 1900 and 1908, respectively, show the development of the pulp industry: Wood pulp, 20,592 and 41,040 tons; cardboard of pulp, 12,715 and 22,946 tons; cellulose, 29,322 and 123,010 tons. At the present time the output of wood pulp and pulp cardboard (used for further manufacture) is estimated at more than 90,000 short tons, and that of cellulose at more than 180,000 tons. In spite of this progress, Russia has remained far behind other countries in the production of wood pulp and cellulose, and, in the exports of those articles, has taken approximately the seventh place. On the other hand, the exports of wood for the manufacture of cellulose has been continually growing, the principal ports of exportation being Riga and Petrograd. Cellulose wood is also exported in large quantities from the Niemann district; in 1900 the exports via the customhouse of Yurburg amounted to 846 tons of this wood, while in 1910 they had risen to 317,412 tons.

MANUFACTURE OF PAPER CIGARETTE CASES.

A distinct feature of the paper industry is the manufacture of paper cigarette cases, for which there exists a large market. There are about 105 concerns exclusively engaged in the manufacture of cigarette cases; some of them are small factories with primitive equipment, while quite a number represent modern works with up-to-date equipments and electric motors.. The greatest number of such firms are located in the Polish Provinces.

The Government runs its own paper mill for the manufacture of paper for bank notes, Government stamped paper, etc., the method of manufacture of which is kept in strict secret.

PETITION OF RUSSIAN PAPER MANUFACTURERS.

In connection with the revision of commercial treaties, a group of Russian paper manufacturers has addressed a peculiar petition to the Minister of Trade and Industry. This petition says that a great rise in price has lately taken place in regard to cellulose and wood pulp required for the manufacture of paper, the price of the so-called paper wood having increased from 25 to 45 and 48 rubles per cubic sashen ($12.87 to $23.17 and $24.72 per 343 cubic feet), in consequence of the exports of this article, which are increasing from year to year.

In view of the above, the paper manufacturers consider it necessary to raise the railway freight rates by 100 per cent on all "paper wood" shipped by rail to foreign countries, and to change the shipping rates to foreign ports from one-half kopeck to 15 per cent of the value of the shipment. At the same time they are petitioning for a considerable reduction of railway freight rates for the same article, if forwarded for the requirements of cellulose and wood pulp concerns, within the limits of such requirements duly certified by the factory inspectors. Moreover, the petition includes the request to reserve part of the Government forests for the special requirements of the paper industry.

FIRST PAPER MILL IN SIBERIA.

There was until recently no paper mill in Siberia, although the demand for paper of various qualities is very considerable in that country. Consequently, Siberia presented a good market for paper made in Russia. The high cost of transportation and the comparatively high prices for wood and other raw products kept the cost of the paper on a somewhat high level in Siberia.

These facts were the incentive that induced a number of traders in Tomsk to start a large paper factory (mill) in that city. The factory will produce cardboard, yellow wrapping paper, and white paper for newspapers. It is intended to build a large factory so that the daily output should reach 36,000 pounds, thus enabling it to produce over 10,800,000 pounds a year. The production of paper on such a large scale will enable the factory not only to supply Siberia with paper but also to bring it in to Russia. The mill will be supplied with the latest machinery and will require 2,000 horsepower. It will be in running order in September or November of this year (1914).

Statistical data are published by the Government in regard to the output of mills, horsepower used, number of workmen, etc., but these data are not quite up to date, the latest available details relating to the year 1908. Besides, in the statistical reports the industries of Russia are divided into groups, the paper-producing mills being grouped together with bookbinding concerns and printing works. According to the latest brief reports, of 1912 this group included 1,436 firms (the number of paper mills being 410); the total number of workmen employed was 99,676. According to the information collected by this office, the number of hands employed in the paper mills does not exceed 32,000. The average annual earnings of the workmen in this group did not exceed 300 rubles ($154.50).

According to the statistical data of 1908, there were 1,333 concerns in the above-mentioned group; the total production equalled 132,059,700 rubles ($68,010,745); number of workmen, 88,008; horsepower, 85,642; value of raw material consumed, 57,958,600 rubles ($29,848,679); value of fuel used, 8,501,100 rubles ($4,378,066); cost of labor, 26,295,000 rubles ($13,541,925); other expenses, 26,588,000 rubles ($13,692,820). These data do not include Finland.

The equipment for paper mills is mostly supplied from Germany and France. In 1912 the imports of machinery for paper mills amounted to 109,840 rubles ($61,467,600), of which 105,840 rubles ($59,207,600) worth was imported from Germany, and the balance, 4,000 rubles ($2,060), from France.

One firm informed this office that machinery for manufacturing paper was sometimes purchased in America, but that this was an exception. The reports of the customhouses do not show any imports of such machinery from the United States.

STATISTICS OF EXPORTS AND IMPORTS.

The following table gives the exports of paper and paper manufactures from Russia in 1910, 1911, and 1912, including the exports over the Asiatic frontier:

Articles and countries of destination.	1910	1911	1912
Wood pulp:			
Great Britain	$203,638	$240,982	$296,374
Belgium	169,111	162,270	135,575
Denmark	69,573	62,200	33,780
United States	206,633	49,656	32,640
Germany	601	41,538	13,262
Netherland	15,936	10,557	12,075
Other countries	126,694	98,496	172,583
Total	792,186	665,699	696,289
Writing paper:			
Persia	45,915	29,553	33,023
China	45,393	15,408	20,506
Afghanistan	879	469	2,195
Finland	2,424	2,761	3,305
Germany	780	561	1,399
Bulgaria	515	....	1,133
Other countries	669	1,422	763
Total	96,575	50,194	62,324
Packing paper:			
Persia	19,522	19,798	8,683
China	10,393	7,092	8,234
Finland	21,826	23,758	43,715
Other countries	598	966	534
Total	52,339	51,614	61,166
Cardboard:			
China	....	$196	$5,067
Persia	$2,460	3,728	1,834
Other countries	466	734	585
Total	2,926	4,657	7,476
Cigarette paper and manufactures thereof:			
Germany	5,031	8,254	6,339
Austria-Hungary	2,443	3,340	2,131
Denmark	72	361	1,514
China	11,167	8,298	28,722
Persia	10,396	8,612	8,202
Turkey	2,448	1,286	1,775
United States	175	1,854	167
Other countries	5,622	1,826	3,221
Finland	1,608	11,539	....
Total	38,956	45,470	52,071
Cigarette cases:			
China	59,870	52,931	58,318
Persia	8,379	6,064	13,376
Finland	13,354	15,149	13,122
Germany	5,212	3,729	3,778
Other countries	3,217	969	2,278
Total	90,032	78,832	90,872

Imports of paper, paper manufactures, and raw material therefor into Russia during 1910, 1911, and 1912 were as follows:

Articles and countries of origin.	1910	1911	1912
Rags, except woolen:			
Germany	$177,998	$150,882	$198,257
Great Britain	1,247	2,648	5,271
France	1,895	15,993	5,299
United States	39	327	....
Other countries	507	....	971
Total	181,686	169,850	209,798
Wood pulp, prepared by mechanical process:			
Germany	101,365	81,040	61,140
Austria-Hungary	67,343	52,557	57,107
Denmark	2,626	6,739	618
Sweden	18,128	2,420	547
Norway	3,798	1,442	412
Finland	326,868	438,161	485,691
Other countries	4,092	311	1,282
Total	524,220	582,670	606,797
Cellulose, chemically prepared:			
Germany	98,444	119,614	119,672
Austria-Hungary	39,706	31,241	11,190
Denmark	1,629	14,802	8,153
Great Britain	1,267	2,876	3,881
Norway	6,337	1,155	15,727
Belgium	....	1,061	....
United States	....	9	431
Finland	224,074	207,082	206,065
Other countries	3,310	1,952	378
Total	374,767	379,192	365,487
Paper cuttings and waste paper:			
Germany	$5,418	$3,428	$7,077
Great Britain	978	1,339	427
Other countries	31	113	99
Total	6,427	4,880	7,603
Cardboard, of wood pulp, not colored, in sheets:			
Germany	7,517	5,336	8,240
Austria-Hungary	9,002	11,540	7,823
Sweden	....	1,031	....
United States	....	309	....
France	2,629	2,776	....
Finland	611,282	711,655	764,775
Other countries	3,872	....	....
Total	634,202	732,647	780,838
Cardboard, of wood pulp, colored in the paste:			
Germany	17,812	27,272	19,586
Great Britain	3,829	4,516	922
Austria-Hungary	285	....	2,068
Denmark	1,195	1.030	78
United States	438	123	....
Japan	958	....	1,467
Finland	50,248	4,224	2,948
Other countries	754	175	167
Total	75,519	37,340	27,236

Articles and countries of origin.	1910	1911	1912
Cardboard, of rags or straw, or any other kind, in sheets, strips, cards; cards for Jacquard looms not satined:			
Germany	$26,555	$20,387	$31,930
Great Britain	3,757	4,825	4,293
Finland	3,090	61	180
United States	1,313	1,575	2,063
Other countries	3,594	3,078	2,299
Total	38,309	29,926	40,765
Tarred cardboard for roofing:			
Germany	69,255	51,949	70,040
Great Britain	2,721	6,280	7,016
Austria-Hungary	906	4,146	2,971
Belgium	....	....	8,461
United States	1,838	9,421	13,750
Finland	85	717	5,465
Other countries	968	3,080	2,507
Total	75,773	75,593	110,210
Cardboard or paper, impregnated with rosin, antiseptics, sulphur, etc.:			
Germany	24,971	16,055	14,179
Great Britain	4,144	7,261	....
Norway	....	6,422	2,098
United States	6,063	1,982	2,647
Other countries	2,063	....	1,678
Total	37,231	31,720	20,602
Papier - mâché and carton-pierre, not manufactured:			
Germany	1,497	4,524	11,330
United States	....	....	3,296
Other countries	225	235	1,287
Total	1,722	4,759	15,913
Cardboard of all kinds mentioned above, in rolls:			
Germany	2,544	8,408	1,917
Finland	418	17,570	1,380
Other countries	1,523	789	555
Total	4,485	26,767	3,852
Bristol cardboard, weighing more than 650 grams per square meter (1.2 pounds per square yard); cardboard glazed or polished and colored, in rolls and sheets; cards for Jacquard looms of satined cardboard:			
Germany	76,993	90,480	67,465
Great Britain	2,164	3,473	7,304
Austria-Hungary	420	13,485	....
United States	12	30	1,626
Other countries	2,252	1,529	....
Total	81,841	108,997	76,395
Cardboard tubes for winding yarn:			
Germany	3,740	4,958	5,930
Austria-Hungary	....	1,570	....
Other countries	277	453	894
Total	4,017	6,981	6,824
Manufactures of cardboard, papier-mâché:			
Germany	$31,139	$24,068	$33,324
Great Britain	5,454	3,798	2,466
Austria-Hungary	650	....	2,860
Finland	....	....	1,038
United States	51	18	41
Other countries	989	1,229	444
Total	38,283	29,113	40,173
Bristol board, weighing 650 grams or less per square meter (1.2 pounds per square yard), also Bristol cardboard of all kinds, with watermarks, impressed designs, or patterns, or cut with strips or cards:			
Germany	50,428	58,171	72,801
Great Britain	1,270	4,909	2,897
Netherlands	6,654	6,764	3,347
Austria-Hungary	2,444	2,095	1,532
France	521	465	1,171
Other countries	748	867	667
Total	62,065	73,271	82,415
Packing paper made from wood pulp alone:			
Finland	1,899,838	1,982,754	2,315,971
China	10,665	2,080	2,159
Other countries	222	1,034	104
Total	1,910,725	1,985,868	2,318,234
Paper of all kinds, except that separately designated, not ornamented:			
Germany	185,812	171,851	213,103
Netherlands	13,870	13,331	21,488
Austria-Hungary	5,334	8,197	6,259
Great Britain	6,333	15,509	5,910
China	4,266	5,580	10,558
France	6,349	5,462	5,616
Finland	6,114,273	6,378,987	6,811,549
United States	171	46	391
Other countries	2,060	1,898	1,200
Total	6,338,468	6,600,861	7,076,074
Paper pasted on tissue of flimsy texture, on linen calico:			
Germany	7,181	6,895	11,961
Netherlands	1,349	3,453	952
Other countries	1,349	559	295
Total	9,879	10,907	13,208
Copy books, not bound; ruled paper:			
Germany	9,925	16,973	13,194
France	903	648	1,155
Other countries	2,120	2,914	1,048
Total	12,948	20,535	15,397

Articles and countries of origin.	1910	1911	1912
Collars, cuffs, shirt fronts, of paper:			
Germany	$271,994	$208,665	$214,595
Austria-Hungary	2,187	1,371	3,127
France	397	927	2,240
Other countries	1,533	4,148	876
Total	276,111	215,111	220,838
Paper with watermarks of any kind:			
Germany	118,325	114,513	135,097
Great Britain	27,373	24,175	19,543
Austria-Hungary	6,230	3,497	4,523
Netherlands	7,449	6,567	2,921
France	7,462	9,551	9,007
China	3,625	1,633	2,858
Sweden	442	1,267	1,366
Japan	547	729	867
United States	554	1,142	671
Finland	287	468	3,919
Other countries	4,083	2,439	844
Total	176,377	165,981	181,616
Wall paper and borders for the same:			
Germany	81,088	73,654	89,806
Great Britain	5,087	8,381	5,667
Netherlands	1,210	2,163	1,514
France	5,917	8,975	5,343
Finland	187,401	186,656	208,038
Other countries	2,986	1,273	928
Total	283,689	281,102	311,296
Vegetable parchment and pergamin:			
Germany	33,991	37,145	43,221
Austria-Hungary	661	1,498	1,679
Belgium	3,862	20	1,030
Finland	28,711	42,003	33,307
Other countries	1,615	1,299	1,702
Total	68,840	81,965	80,939
Tracing paper and paper impregnated with wax, paraffin, etc.:			
Germany	68,926	70,835	92,424
Great Britain	20,585	19,660	19,710
Austria-Hungary	1,963	1,815	2,203
Denmark	....	....	1,336
United States	302	273	173
Other countries	2,163	5,142	2,372
Total	93,939	97,725	118,218
Cigarette (tissue) paper, white or colored:			
Germany	40,037	37,481	59,648
Great Britain	6,173	9,733	7,469
Austria-Hungary	9,437	11,316	8,587
France	21,858	21,800	12,859
Turkey	2,139	1,756	1,781
Finland	203,621	258,676	220,478
Other countries	1,030	47	....
Total	284,295	340,809	310,822
Thin copying paper and thin packing paper:			
Germany	$36,124	$23,965	$18,040
Great Britain	1,842	1,965	3,374
China	907	250	3,861
United States	162	33	678
Japan	4,325	3,696	5,435
Finland	51,093	64,250	82,664
Other countries	13,529	5,088	1,854
Total	107,982	99,181	115,906
All kinds of paper, not colored in the paste, but painted on one or both sides, either white or in colors, except kinds separately designated:			
Germany	36.307	38,059	66,729
Great Britain	2,963	3,482	1,311
Austria-Hungary	2,431	3,007	1,604
United States	606	181	444
France	5,995	3,985	1,699
Finland	8,892	15,576	10,360
Other countries	1,426	832	743
Total	58,620	65,122	82,890
Sensitized paper:			
Germany	326,534	361,971	430,892
Great Britain	35,020	42,745	33,185
Belgium	3,930	14,371	16,124
Austria-Hungary	4,178	6,930	5,776
United States	21	203	103
France	3,350	6,770	9,466
Other countries	1,268	922	889
Total	374,301	433,912	496,435
Paper and cardboard, ornamented, i. e., gilt, silvered, bronzed, stamped pink, decorated, with patterns, drawings, etc., also transfer pictures:			
Germany	98,457	89,979	79,695
Great Britain	3,438	2,276	3,614
Austria-Hungary	4,694	4,601	3,973
France	5,086	5,389	3,359
Japan	2,489	3,786	3,237
Turkey	897	212	2,182
China	1,696	803	1,704
United States	191	323	901
Finland	6,349	9,063	15,648
Other countries	2,205	2,060	2,185
Total	125,502	117,492	116,498
Manufactures of paper such as flowers, lamp shades, etc.:			
Germany	627,804	683,541	728,210
Great Britain	19,909	21,010	13,101
Austria-Hungary	32,932	29,190	20,122
Netherlands	2,163	3,454	4,676
Denmark	1,037	607	2,057

Articles and countries of origin.	1910	1911	1912
Manufactures of paper—Contd.			
France	$13,563	$17,861	$15,048
Sweden	2,127	2,201	2,269
Japan	1,747	3,555	2,036
United States	180	1,339	572
Finland	14,414	33,394	34,818
Other countries	3,515	5,327	2,717
Total	719,391	801,479	820,626
Paper envelopes:			
Germany	15,255	13,927	21,626
Austria-Hungary	3,843	1,802	2,037
United States	15	....	23
Finland	7,224	9,107	5,862
Other countries	2,851	4,273	2,659
Total	29,188	29,109	32,207

Articles and countries of origin.	1910	1911	1912
Bookbinding and cardboard wares of all kinds, account books and copybooks in bindings, bindings for books and albums imported separately:			
Germany	$128,257	$149,110	$185,839
Austria-Hungary	4,411	4,526	6,678
Great Britain	5,240	6,664	3,920
France	5,712	7,249	6,638
Sweden	545	908	1,158
China	4,247	1,122	1,586
United States	70	309	83
Other countries	3,111	3,373	2,605
Total	151,593	173,261	208,507

The total imports of paper and paper manufactures and material by countries were as follows:

Countries.	1910	1911	1912
Germany	$2,398,666	$2,411,095	$2,735,838
Great Britain	164,729	197,787	138,218
Austria-Hungary	103,801	114,420	93,117
Netherlands	35,739	43,330	39,651
Belgium	10,242	16,552	26,834
Denmark	5,400	3,375	6,113
United States	12,002	21,758	25,848
France	90,370	101,219	77,367
China	28,047	13,206	24,684
Japan	12,349	14,630	15,949
Sweden	7,242	7,019	8,284
Turkey	7,728	5,298	5,035
Finland	9,189,342	9,719,102	10,521,557
Other countries	9,730	10,209	6,828
Total	12,075,387	12,679,000	13,725,323

IMPORT DUTIES.

Paper and paper manufactures and material therefor, if imported from Finland pay duty according to a preferential tariff. The following table gives the rates of duty on imports from Finland and from other countries:

Paragraph.	Articles.	From Finland.	From other countries.
		Rubles.	*Rubles.*
176–2	(a) Pulp for manufacture of paper, except pulp chemically prepared, dry, per 36.11 pounds	0.26 ($0.13)	0.35 ($0.18)
	(b) Moist, containing 50 per cent or more of water, per 36.11 pounds	.16 (.08)	.18 (.09)
176–3	Paper dippings and waste, per 36.11 pounds	.26 (.13)	.35 (.18)
	Pulp imported in the shape of cardboard pays the above tariff only if it is perforated or cut into pieces.		
176–4	Pulp prepared chemically (cellulose):		
	(a) Dry, per 36.11 pounds	.45 (.23)	.60 (.31)
	(b) Moist, per 36.11 pounds	.45 (.23)	.30 (.15)
177–1	Cardboard (except Bristol board) and manufactures of cardboard and papier-mâché (except those that are varnished or ornamented), per 36.11 pounds	.45 (.23)	.60 (.31) to 1.20 (.62)
177–2a	Packing paper made of wood, not colored, per 36.11 pounds	.50 (.26)	4.00 (2.06)
177–2b	Paper, various, per 36.11 pounds	.82½ (.42)	6.00 (3.09)
177–2f	Cigarette paper, copying paper, tissue paper, per 36.11 pounds	1.60 (.82)	12.00 (6.18)
177–1	Bristol board, per 36.11 pounds	1.60 (.82)	6.00 (3.09) to 8.00 (4.12)
177–2d	Wall paper, per 36.11 pounds	1.60 (.82)	9.00 (4.63)
177–3	Paper manufactures, various, per 36.11 pounds	2.35 (1.21)	17.00 (8.76)
177–4	Office and notebooks, per 36.11 pounds	2.35 (1.21)	30.00 (15.45)

GOVERNMENT PURCHASES.

Government departments, as Ministries, Government railway offices, etc., are all large purchasers of paper. Orders are given out once a year; the competing firms must give in their tenders together with samples of paper; these samples are tested on special apparatus in regard to firmness, the raw material employed, etc., and orders are placed with the firm who has stated the lowest terms, provided the samples meet all the requirements stated in the technical regulations of the Government. Of course, preference is given to Russian firms.

The railway department in Moscow runs its own printing office. Contracts for paper are concluded once a year, and all forms, schedules, etc., are printed at the railway printing office.

EXPORTS OF PAPER GOODS FROM RUSSIA.

From Consul General John H. Snodgrass, Moscow.

With reference to an article published in the Trade and Industry Gazette in regard to the possibility of increasing the exports of wood pulp and cellulose from Russia to the United States, a Russian writer has the following to say:

> The most important item of Russia's foreign trade is grain; however, the exports of the same bear an unsteady character, varying in dependency of the conditions prevailing on the world's grain market, of the state of the annual crops, of the competition with other countries, etc. It would be advisable, therefore, to promote the development of the exports of such goods that would not be liable to fluctuations, but, on the contrary, would be able to gain a firm footing or even a monopoly on the foreign markets. Such would be goods in the manufacture of which Russia would have greater advantages than other countries, in consequence of extensive natural supplies of raw material, which the other countries are obliged to import.
>
> Among such goods an important place might be taken by paper goods manufactured from cellulose and wood pulp, which up to now have hardly been exported at all, as they could not stand the competition with the manufacture of other countries for several reasons. One of these is the high customs duty exacted on machinery and material required for this industry; as the same can not be abolished without a general reform of the customs regulations, it would be advisable to apply to the paper industry the same measures that have been introduced in Russia for the exports of other goods, i. e., the repayment of the import duty on machinery and material at the exportation of the goods manufactured with such machinery and material.
>
> Besides this, there is one important measure which alone will be able to give a satisfactory result: At the present moment there is noted a marked increase in the exports of cellulose wood from Russia, which is due to the fact that in most other countries the supply of this wood is being exhausted, as, for instance, in the United States. It can not be considered as a normal condition that Russia exports its raw material when it could take advantage of the natural wealth of the country—the abundance of timber—to develop the manufacture of paper goods, and to export semimanufactured and manufactured goods instead of the raw material as heretofore. As an obstacle in this direction must be considered the continually increasing exportation of cellulose wood to foreign countries, in consequence of which the price of this wood on the interior market has risen to such a degree that it has an injurious influence on the further development of paper factories and the establishment of new concerns in this industry.

The only measure to be introduced is, according to the opinion of the writer, the establishment of a high prohibitive duty on the exports of cellulose wood, which ought to be introduced progressively, i. e., increasing the same gradually according to the development of the paper industry in Russia, so that the export duty might assume a prohibitive character only when this industry shall have reached a stage when it would not only be able to supply the Russian market but have a surplus for exportation.

The exports of paper to other countries may become very considerable in view of the fact that countries that formerly manufactured paper out of their own wood (for instance, Germany, Sweden, and Norway) are now obliged to import the same from other countries, among which Russia stands foremost.

The limitations of the exports of cellulose from Russia would naturally lead to the decrease of the paper manufactures of such countries, and instead of importing foreign paper made from Russian raw material, Russia will be able to supply the foreign markets with the Russian article.

BATUM.

From Consul Leslie A. Davis.

The greater part of the paper used in this consular district is manufactured in Russia, but some of the finer qualities of letter paper are imported from Germany and France. It is not probable that there would be any market here for American paper on account of the great distance and high duty and the steadily increasing manufacture of paper in Russia. There are few wholesale houses or large dealers in paper in the Caucasus and the local dealers usually purchase from wholesale houses in Moscow, Warsaw, Kief, and Odessa. It is impossible to ascertain the amounts of the various kinds of paper or the total amount of paper used in this consular district. The cheaper qualities are most in demand.

There are abundant trees here and in the north Caucasus much straw is available for paper manufacture, but there are no paper mills in the Caucasus. Labor would be moderately cheap but inefficient. No paper is exported from this district.

The wholesale price of letter paper varies from 6 to 18 rubles ($3.09 to $9.27) a ream. Ordinary office paper costs at wholesale 1.40 to 1.60 rubles ($0.72 to $0.82) a ream. The wholesale price of paper for books varies from 3.20 to 3.50 rubles ($1.64 to $1.80) a ream, and that for newspapers from 1.80 to 4 rubles ($0.92 to $2.06) a ream.

The trend in recent years has been to obtain more paper from Russia and less from France and Germany, Much paper now comes from Finland, as it is cheaper than that which is obtained from central Russia. The import trade from abroad is naturally affected by the high customs duty. Shipping facilities for the Caucasus are good. Importers almost invariably receive long-term credits ranging from 3 to 12 months.

Probably the only persons and firms who might be in a position to represent American exporters would be the general agents and commission firms in Baku and Tiflis. Baku is the most important commercial city and chief distributing center for the Caucasus, Transcaspia, and Persia, whereas Tiflis is the largest city and seat of government of the Caucasus.

ODESSA.

From Consul John H. Grout.

In the Odessa consular district there are no paper mills of any importance, the absence of large fir, pine, and larch forests, combined with the scarcity of water in many parts, rendering such undertakings impossible. In the city of Odessa there is one small factory devoted to the manufacture of wrapping paper from rags and waste. The paper supply here is obtained chiefly from Finland, being brought mostly in Russian steamships from the Baltic to the Black Sea ports. Some also comes from mills located in Poland and a limited supply is imported.

During 1912 imports of paper from foreign countries landed at Odessa were valued at $50,297. The principal contributing countries were: Germany, $19,959; France, $14,673; Austria, $6,226; and the United States, $4,644. The sugar-manufacturing centers of the district, especially Kief, import large quantities of packing or wrapping paper. The import of this in 1910 amounted to $1,910,650 and came mostly from Finland by railway. Of late it has been stated that the demand is exceeding the supply. For this reason this class of paper is being imported from other countries. It might be well for American manufacturers to turn their attention to this class of paper demand, although it must be expected that competition on the part of German manufacturers will be met. The Russian Paper Trust is also well organized.

MARKET REQUIREMENTS.

Medium and cheap papers are chiefly in demand here. There is a growing demand for typewriting paper also. Requirements in the line of office and writing papers as regards size, etc., are about the same as in the United States. Within the past year (1913) American note paper and envelopes in attractive boxes have made their appearance in the stationery stores here. Previously there had been nothing on the retail market as attractive. Most of the writing papers of the cheaper qualities are made in Russia or imported from Finland. The better and more expensive grades come from Germany, France, England, and Austria. Russian and Finnish manufacturers do not appear as yet to be able to produce the better and more expensive qualities. Linen papers are imported from Austria. For news paper, a large quantity of which is used all through the district, Finland appears to be the greatest source of supply. That country is able to manufacture it very cheaply and, besides supplying the whole of Russia, large quantities are exported. Quite a number of leading papers in London use paper from Finland. Fiber and manila papers are imported from England and Germany. The cheaper qualities of wall and craft papers are made in Russia and are imported from Finland, while the more expensive ready-made wall papers are imported from France. Tissue paper comes from Finland and France. Blotting paper is manufactured in Russia and is also imported from Finland, Germany, and Austria. Cloth-lined paper comes from Austria, Germany, and France; parchment from Finland and France; and wax and carbon papers are imported from Germany, France, and the United States. Strawboard is made in large quantities in Russia and the demand of this district is supplied by the home product, hardly any being imported from abroad. Box, pressed, and Bristol boards come from Finland mostly, a small proportion being imported from Austria.

The approximate wholesale prices for local and Finnish products, including c. i. f., duty paid Odessa, are as follows: News paper, $1.70 to $1.80 per pood (36 pounds); writing paper, $2.58 to $3.09; strawboard, $0.88 to $2; box board, $1.13 to $1.25; wall papers, $1.55 to

$2.06; parchment, $4.64 to $4.75. The prices of the better qualities, which are imported from various foreign countries, have a very large range. The importation of these products is decreasing, owing to the fact that Russian and Finnish manufacturers are well protected by duties which make it almost impossible for foreign goods successfully to compete. The head of one of the largest wholesale paper houses in this district informs this office that the only reason why any paper is imported at all is due to the fact that the Russian and Finnish manufacturers are not yet able to make the highest grades. The demand for paper is naturally increasing. Finland seems to have the advantage, inasmuch as while the duty on foreign papers and cardboard is fixed at $3.09 per pood (36 pounds), that from Finland only ranges from 31 to 46 cents.

Foreign sellers usually grant six months' credit. This is one of the reasons why so many German goods are sold here. Germany, which grants longer credit to Russian buyers, is so near that her merchants are in a position to closely watch the markets and buyers here. With but little effort she is able to decide where credit will not be abused.

RIGA.

From Consul Douglas Jenkins.

The Russian mills appear to control the market in this district so far as ordinary grades of paper are concerned. Wrapping and printing papers are supplied almost entirely from the mills in this district, with some shipments from Warsaw and Finland. The import from foreign countries is limited to high grades of letter and note paper, drawing paper, tracing cloth, etc. There is a limited import of wall paper from Germany.

It is estimated that, so far as the city of Riga is concerned, the supply of paper coming from the Russian mills forms 75 per cent of the total consumption, only about 25 per cent being imported from abroad. Of the high-grade note and letter paper, the import is principally from Austria, Germany, and England.

The following statistics show the extent to which paper and manufactures of paper and raw materials used in paper manufacturing are exported from this consular district. The figures are for Riga alone, but as that city controls the greater part of the business, they may be considered as fairly representative for the whole district.

Articles.	Year.	Pounds.	Value.	Destination.
Rags	1910	4,260,456	$73,136	England and Germany.
	1912	3,609,000	61,954	Do.
Paper	1910	576	61	Germany and Sweden.
	1912	792	84	Germany and Norway.
Manufactures of paper	1910	1,980	....	Germany.
	1912	2,592	....	Germany and Sweden.
Cardboard, and manufactures of	1910	8,712	....	Denmark and Germany.
	1912	25,344	....	Do.
Cellulose	1910	4,293,144	93,352	England, Germany, Belgium.
	1912	1,449,576	31,520	Do.

In addition to the countries mentioned, there were scattering, unimportant shipments to various places. To the United States declared exports were as follows: Wood pulp (or cellulose), 1911, $153,328; 1912, $68,421; 1913, $16,367.

THE IMPORT TRADE.

The tendency of the Russian import tariff is to protect the local paper manufacturer. In addition, the paper and pulp mills in this and other districts in Russia are banded together into an association, which fixes terms and conditions of sale and possibly has something to do with the regulation of prices.

The quality of Russian paper has been improving in recent years, and the relative import is decreasing, even in the higher grades of paper. The import from foreign countries has showed no tendency to increase of late, although the population of the district, and especially of the cities, has grown very much. Shipping facilities at this port are fair. Besides transshipment via Hamburg, Hull, and Copenhagen, it is possible to ship direct from New York to Libau, in this district, by the Russian-American Line.

Imports of paper and paper-making materials at Riga in 1910 and 1912 were as follows:

Articles.	Year.	Pounds.	Value.	Countries whence imported.
Wood pulp, mechanical	1910	221,148	$2,531	Belgium and Denmark.
	1912	396	17	Do.
Wood pulp, chemical	1910	547,992	15,679	Germany and Belgium.
	1912	1 112,580	31,832	Germany and Sweden.
Rags	1910	1,243,656	21,349	Germany and England.
	1912	2,852,424	72,227	Do.
Waste paper	1910	39,744	227	Germany.
Wrapping paper	1912	67,492	386	England.
Old newspapers	1910	57,240	328	Do.
	1912	38,520	220	England and Germany.
Paper, fine	1910	251,064	53,878	England, Germany, and Belgium.
	1912	268,848	57,693	Do.
Paper collars and cuffs	1910	57,672	9,075	Germany.
	1912	35,208	5,543	Do.
Cardboard	1910	141,354	4,852	Germany, Denmark, England, and Belgium.
	1912	128,160	4,400	Germany, England, and Denmark.
Cardboard, manufactures of	1910	22,392	3,844	Germany and England.
	1912	17,280	2,970	Do.
Wall paper	1910	2,916	376	Germany.

There do not appear to have been any imports from the United States.

Dealers in Riga say that foreign paper mills grant them credit running from three to four months. This applies to the larger, well-established importers but not to small concerns of doubtful standing.

CONDITIONS OF SALE.

The following is a translation of the conditions fixed by the Union of Paper Manufacturers in Russia as agreed upon May 15, 1902, and published as a preface in the catalogue of one of the largest producers of paper in the Empire:

Should there not have been any special conditions agreed upon at the time of sale, the following provisions shall be binding for both parties:

In the settlement of accounts conditions shall be based on weight or on the ream, the latter to consist of from 480 to 500 sheets. The weight of the paper shall be fixed for: (*a*) Cut paper according to size per ream in Russian pounds; (*b*) uncut paper per ream of 480 sheets in poods or in grams per square meter.

Sizes are fixed in centimeters; fractions are calculated up to one-half centimeter.

The maximum normal weight of the paper is to be calculated at 34 Russian pounds (30.685 pounds avoirdupois) for writing paper of 480 sheets or 180 grams per square meter.

The minimum normal weight, in grams per square meter, of a ream of paper shall be: Writing paper, 49 and 43; cut glazed paper, 49; unglazed paper, 46; uncut glazed paper, 54; unglazed uncut paper, 60; uncut advertising paper, 33; uncut tissue paper, 16; uncut for coloring, 49; uncut white and colored wall paper, 49; uncut wrapping paper, 70; uncut brown wrapping from wood pulp, 49; uncut fine wrapping paper, 70; uncut parchment, 43; uncut envelope paper, 49; uncut book paper, 70; uncut cigarette holder, 97; uncut album, 43; uncut filter paper, 65. From 3 to 5 per cent is allowed on the weight in ordering.

Slight differences in shades and finish are not to be regarded as a reason for non-acceptance.

Paper which it is agreed shall not be manufactured of wood pulp shall not contain such an ingredient, but should there happen to be traces of wood fiber, it is not to be regarded as proof of the existence of wood pulp.

Orders placed for special kinds of paper must not be less than 150 poods (5,416.50 pounds) for each sort, size, and color, and the person ordering is bound to accept 15 per cent of the quantity produced.

Papers containing watermarks are higher in price.

The weight of advertising and wrapping papers packed in separate reams is calculated gross for net weight. Cases and packing for long distances are charged extra.

The place of delivery of the goods is fixed by the person making the order, but the goods are forwarded at his own risk. In case the freight is paid by the buyer, should the goods be sold free any station (railway), the buyer has no right to claim any discount. Cut paper is charged for at a higher rate than uncut.

In placing an order for paper the following details must be given: (*a*) A signed sample of not less than half a sheet, to be retained; (*b*) quality of the paper; (*c*) number of reams and total quantity in weight; (*d*) dimensions in centimeters; (*e*) weight of ream in pounds (Russian); (*f*) number of sheets in a ream; (*g*) conditions of packing; (*h*) cut or uncut; finish, smooth, rough, glazed, or fine.

To avoid misunderstandings, all orders should be signed. Any complaints must be made within two weeks after receipt of the goods. Strikes, disturbances, or any other unforeseen circumstances liberate the mill from prompt delivery of the goods.

[Here follows certain extra charges to be made for ruling with colored lines, together with diagrams.]

Such ruling is not done unless the order is for at least 10 reams.

All damages to goods while in transit are to be borne by the purchaser.

Marine insurance is covered by the mill.

WARSAW.

From Consul Thomas E. Keenan.

Paper used in this consular district is supplied partly by the local mills and partly by those of Finland and Russia proper.

The situation of the local paper industry improved materially within the last few years by reason of increasing demand, and, although the price of raw material and labor advanced, the price of paper remained stationary. This last fact was caused by the competing Finnish mills. Polish paper manufacturers aim to perfect their output, and have lately begun to turn out paper in rolls for newspapers, heretofore imported from Finland, thus overcoming the advantage enjoyed by the Finnish mills—the raw material and water power so abundant in Finland.

Nevertheless, local mills fear the intended unification of customs of the Grand Duchy of Finland with the rest of the Empire, for in that instance, not having to pay any duty at all, Finnish paper mills will flood Poland with their output. Competition from foreign concerns is not feared, by reason of the almost prohibitive tariff upon foreign paper, and almost no foreign paper is imported with the exception, perhaps, of the best quality of "de luxe" letter paper and some draftsman's paper.

Rotary (roll) paper for publications, etc., is excluded entirely by the nearly 100 per cent duty ad valorem. It is characteristic of the paper industry here that sometimes mills realize less for their finished product than the cost of manufacturing. The reason for this is that Finland throws much of its finished products upon the Polish market, overcoming with ease the customs duty of 41 cents United States currency per each 36 American pounds, whereas the customs duty upon the same class of paper from other countries is $2.06 per 36 pounds.

The raw material used here is cellulose, which costs about 95 cents United States currency unbleached and $1.14 bleached per 36 pounds; wood pulp, 61 to 76 cents per 36 pounds; linen rags, $1.25 per 36 pounds; and cotton rags, 46 cents up to $1 per 36 pounds.

There are at the present six large and about a dozen small paper mills in Poland with a yearly production worth approximately $8,000,000. Various kinds of paper are turned out, as gray and brown wrapping paper (heavier and not as strong as the American), printing in sheets and rolls, cigarette paper and cigarette holders, office, school, and letter paper, and cardboard.

Importations from countries other than Finland are nominal, only the highest grade of letter paper and certain kinds of technical and draftsman's paper presenting any chances for successful importation.

Retail prices in United States currency for 36 pounds are as follows: Tissue paper, $6 to $10; wrapping paper, $1.27; legal and office paper, $2.06 to $4; book paper, $3.10 to $4.10; letter paper, $3.10 to $6.15; paper in rolls for publications, $2.06.

SPAIN.

BARCELONA.

From Consul General C. Bailey Hurst.

The market for paper of all classes in Spain is to a very notable extent already sufficiently catered to, so far as four-fifths of the consumption goes, by the locally made product, there being in the neighborhood of 200 paper manufacturing plants in operation. This comprehends, it is true, only the ordinary and special grades of wrapping, printing, and writing papers, and such specialties as cigarette papers, cork papers, and some handmade of a not particularly fine variety, but still of that quality of distinction which has been so largely suppressed by the machine-made papers of to-day.

This paper is largely used for the usual official written, stamped, and attested documents of the various departments of the Spanish Government, notarial instruments, and the like. It is in no sense a phase of the trade which could be diverted by a superior article of importation, or even one of lesser value, nor is it one susceptible of a large development.

The cigarette papers are also of a special class, and in spite of importations from France, and even from Germany, it is probable that inasmuch as Spain is an exporter of this grade of paper, there is no business to be developed along this line.

Of other fine papers, the better grades intended for private and commercial correspondence, the imports are already notable, but their proper classification is that of high-grade novelties, sold only in the most populous and wealthy cities. The ordinary correspondence of the country, both private and commercial, is still done with little regard for the esthetic appearance of the communication or the material with which it is produced. The ordinary writing papers, even with printed headings, are often ruled on one or both sides, and very frequently they are of the "quadrille" variety, and for all such uses a very ordinary quality suffices.

STATE OF PRINTING TRADE DEMANDS.

It is possible that there could be a considerable increase of American-made fine printing papers, such as are used for high-class circulars, pamphlets, engraved business letterheads, and the like, but it would hardly seem that the featherweight, deckle-edge, fine book papers would ever find a market here in great bulk. Works of a real value and substantial presentation are still printed on calendered papers of ordinary grades, with a concession in recent years affecting the supercoated, high glacé-finish papers, which in spite of their undeniable lack of artistic worth are generally considered to present a work of even minor importance in an imposing manner, at least among the nonbookish, noncritical element.

Fine writing papers from America, in colored and deckle-edge varieties, in small sizes and in small quantities, will probably find an increasing sale in years to come, for even now they are not unknown, though the quantities are small as compared with similar goods imported from European countries, as are shown by statistics. Competition is from France, England, Germany, and Austria, and with the general complexion of lower prices on the product from all these countries it must be apparent that the hope of a largely increased market for American manufactures in these lines will depend largely upon the novelty and excellent appearance of the article. There is, furthermore, only a restricted market for this class of paper in Madrid, Barcelona, and in the large secondary cities of the seacoast, all of which are usually supplied from the principal jobbing point of Barcelona, and, to a lesser extent, Madrid.

Roll paper for use with perfecting presses is only used in any considerable quantities in Madrid and Barcelona, the smaller cities having only papers of inconsiderable circulations; hence the variety is not one which has a wide distribution, nor can it be expected to have until circulations increase and the present flat-bed and cylinder presses working flat sheets (approximately 26.7 by 17.3 inches) are supplanted. As the latter are still being installed, chiefly of recent German, French, or English make, with a few of American manufacture, the very considerable increase of consumption of newspaper print in rolls is not to be looked for unless a very largely augmented output comes into being through increased circulations of the metropolitan journals.

There is little high-grade printing produced in Spain, as it is known in the United States, England, France, and Germany, and the workmanship of all natures in the printing trade is more or less crudely and roughly accomplished. This applies to de luxe impressions as well as to ordinary job printing. Of color work this observation is notably applicable, and most classes of poster and handbill output have an astonishingly low-grade appearance, not only with regard to workmanship but a general garishness, due to a nonexpert handling of poor materials.

Coated book papers, largely of German origin, are being used more and more, but as it is admitted by the expert that this species of printed work is hardly in the finer class, it may be considered that the common use of coated printing paper is simply a move toward giving the nondiscriminating public something which at least looks better to him because of its glossiness. As to quality, much of this stock is composed of the poorest of ingredients, and it is in no way durable, nor is it suitable for many of the uses to which it is put.

In general, it may be taken that the finer grades of printing, and the demand for superior materials therefor, is in its infancy in Spain, though an effort is being made in a small way by the more progressive craftsmen in Madrid and Barcelona toward the adoption of something better in quality, more novel in aspect, and differing from that which has been in common use heretofore.

It is for this reason that foreign-made papers have been able to make only a small headway in the trade, and it is notable that even then it is only with the finer grades and specialties which are not produced in Spain. The competition which American papers will have to meet is not only that of Spain but of the exporting countries which have already broken into the market, particularly that of Germany and Austria, which countries make their chief argument a matter of price. In certain grades of coated book stock, also in writing papers of secondary appearance, there has, furthermore, developed this home-market competition which to-day, more than ever before, is making the import trade more difficult of carrying to a successful issue, a phase of the question which is apparent even in the falling off, as shown by statistics, in the better grades of paper specialties from Germany, which has hitherto been the chief source of supply.

For the cheaper and more ordinary grades of paper Spain seems to have conquered and is able to hold the local market, though here, perhaps, more than in any other of the chief European countries, the buying public of even the better class seldom has any expert knowledge of market prices or values, though manifestly largely influenced by novelties and the general attractiveness of the article as put before them by the shops of Madrid and Barcelona.

The cheaper grades of blotting paper, of that quality so often distributed in the form of advertisements, are of local manufacture; the better grades in white and "art shades" are shown in small quantities in the high-class stationers and are imported chiefly from Germany and Austria and to a small extent from England. There are to be seen no products of this kind as good as the average blotting paper of America.

MARKET REQUIREMENTS.

As to the kinds of paper and amounts most in demand it is most difficult to be precise, not only with respect to the Barcelona district but with the whole of Spain. On broad lines, save for the hand-made papers used for official documents, cigarette papers, and the most ordinary of wrapping and print papers, the tables of importations given elsewhere indicate the market demand for the various kinds of paper in general use. These varieties, as shown by comment elsewhere in this report, are practically all importations, the home production catering only to the special and more common lines. The estimate, then, as based upon importations, is representative of the classes of papers usually carried by the wholesale houses of Barcelona, the chief distributing point for all Spain.

Foreign papers used in Spain are largely of the nature of fine writings, flat and in papeterie form, with such specialties as may be suited to various industries and professions—photographic, carbon, and other special papers and proportionately still smaller quantities of wall papers.

Carbon paper is said not to be produced in Spain, and from samples seen in the trade the quality is manifestly so bad that it might have been produced anywhere, even with the most primitive of facilities. German, English, and French carbon papers are on the market here, the first named in by far the largest quantities, while the higher-priced carbon paper of America is so favorably known and received that it would seem to be only the question of price which prevents it excluding the other foreign makes from this market. The same applies to blotting papers from America, though it is manufactured here in moderate quantities.

The market requirements have been not a little affected by the growth of the paper-manufacturing industry in Spain during the last decade. This is readily arrived at by a study of the import figures for the past quarter of a century, those given below having been compiled from official statistics. They show plainly the tendency toward the increasing use of Spanish-made papers of low and medium grade, while the imports latterly have been confined largely to such specialties as are not manufactured at home. There are some fluctuations to be remarked, but the general trend of imports as to volume is downward, though in valuation, as is shown by another table which gives the 1911 imports in detail, they show a proportionate rise. This indicates that home-manufactured products meet the demand fairly well, while those from abroad are of the nature which are not found at home.

The following is a comparative statement of Spanish imports in tons of 2,204.6 pounds of three principal varieties of paper for 21 years, 1889 to 1909:

Years.	Printing and writing paper.	Wrapping paper.	Card stock and pasteboard.	Years.	Printing and writing paper.	Wrapping paper.	Card stock and pasteboard.
1889	3,078	1,530	2,348	1900	280	863	1,202
1890	1,521	1,734	2,664	1901	226	720	1,106
1891	1,289	2,004	2,967	1902	512	1,100	1,310
1892	886	1,478	1,775	1903	708	1,363	1,277
1893	616	1,203	1,379	1904	442	1,105	1,297
1894	340	1,167	1,534	1905	452	1,111	1,229
1895	468	1,000	1,557	1906	602	1,170	317
1896	493	883	849	1907	836	1,125	518
1897	301	846	840	1908	822	901	475
1898	184	830	611	1909	678	825	508
1899	202	1,026	1,188				

The quantity (in tons of 2,204.6 pounds) and value (in U. S. currency) of the Spanish import trade in paper, shown in detail by articles and countries for the year 1911, are as follows:

Articles and countries.	Quantity.	Value.
Paper pulp, cuttings, old paper, and rags:	*Tons.*	
Germany	6,607.9	$129,034
Algeria	9.5	186
Austria-Hungary	79.6	1,555
Belgium	946.9	13,494
Egypt	10.2	1,114
United States	261.3	5,104
France	94.4	1,845
United Kingdom	527.7	10,308
Netherlands	781.8	15,269
Norway	6,735.9	131,553
Portugal	1.2	24
Russia	2,615.3	51,077
Sweden	21,534.4	420,567
Switzerland	395.0	7,714
Wrapping paper (ordinary):		
Germany	493.3	57,718
Austria-Hungary	5.3	626
Belgium	30.4	3,564
United States	5.4	588
France	23.6	2,803
United Kingdom	29.7	3,474
Netherlands	10.2	1,200
Norway	20.1	2,356
Sweden	52.5	6,148
Switzerland	2.0	245
Italy	1.0	119
Japan	.1	14
Wrapping paper (tissue, etc.):		
Germany	7.1	943
Belgium	7.3	457
France	1.0	137
Netherlands	3.9	518
Wrapping paper (not specified):		
Germany	.3	52
Belgium	.1	26
France	.5	103
United Kingdom	.2	35
Roll paper:		
Germany	549.0	78,963
Belgium	40.1	6,964
France	147.7	27,971
United Kingdom	82.2	14,971
Netherlands	152.9	22,439
Switzerland	.3	66
Italy	.7	96
Japan	4.0	1,007
Austria-Hungary	84.4	11,191
United States	5.7	1,194
Fine papers, white and colored, including handmade and blotting:		
Germany	130.1	33,312
Austria-Hungary	.2	69
Belgium	42.3	10,836
United States	3.8	980
France	68.3	17,426
United Kingdom	48.9	12,534
Netherlands	13.1	5,408
Switzerland	1.3	351
Parchment, waxed and other coated papers:		
Germany	99.8	17,523
Belgium	19.0	3,346
United States	.9	169
France	18.2	3,199
United Kingdom	4.7	836
Netherlands	11.0	1,834
Switzerland	1.1	206
Ruled papers, invoices, and letterheads in blank, labels, etc., not otherwise specified:		
Germany	24.8	19,399
Austria-Hungary	.3	239
Ruled papers, etc.—Contd.	*Tons.*	
Belgium	3.0	$2,341
United States	.6	472
France	37.2	29,031
United Kingdom	8.3	5,408
Italy	2.1	1,683
Switzerland	.8	682
British possessions in Asia	.5	390
Waterproof paper, reinforced with fiber strands:		
Germany	.5	220
Belgium	.2	82
France	2.6	1,011
United Kingdom	1.4	406
Cloth-lined papers:		
Germany	3.9	2,313
Belgium	.5	350
United States	.01	6
France	.3	220
United Kingdom	.4	244
Netherlands	.3	200
Cardboard and Bristol, 200 to 500 grams per square meter (0.44 to 1.1 pounds per 10.76 square feet):		
Germany	130.5	19,882
Argentina	1.1	165
Belgium	3.1	472
France	13.1	1,995
United Kingdom	10.1	1,498
Netherlands	29.9	4,413
Italy	.3	54
Cardboard and Bristol, above 500 grams per square meter (1.1 pounds per 10.76 square feet):		
Germany	229.4	31,306
Austria-Hungary	20.8	2,842
Belgium	19.1	2,610
United States	.1	12
France	73.3	10,000
United Kingdom	39.0	5,325
Netherlands	18.9	2,591
Italy	5.8	801
Switzerland	.1	13
Papier-mâché, plates, trays, etc.:		
Germany	38.1	11,899
Argentina	6.0	1,872
Austria-Hungary	.2	66
France	13.8	4,317
United Kingdom	6.1	1,818
Italy	8.1	2,544
Switzerland	.2	72
Pasteboard boxes and folding boxes of common stock:		
Germany	9.6	1,877
Belgium	.1	64
United States	.1	20
France	16.2	3,162
United Kingdom	4.2	820
Switzerland	2.2	437
Fancy paper-lined pasteboard boxes:		
Germany	28.5	16,646
Austria-Hungary	.6	381
Belgium	1.4	858
United States	.03	15
France	16.7	9,792
United Kingdom	3.9	2,284
Italy	1.6	979
Switzerland	1.5	874
Paper bags, printed and unprinted:		
Germany	3.2	1,247
France	2.7	1,072

Articles and countries.	Quantity.	Value.	Articles and countries.	Quantity.	Value.
Envelopes and note paper and envelopes in papeterie form:	*Tons.*		Cigarette paper:	*Tons.*	
Germany	28.7	$14,007	Germany	12.5	$6,096
Austria-Hungary	.7	345	Austria-Hungary	7.2	3,494
Belgium	.9	463	France	76.4	37,117
United States	1.1	518	Netherlands	1.5	732
France	30.6	14,933	Photographic paper:		
United Kingdom	12.2	5,960	Germany	6.7	6,502
Netherlands	1.6	113	Austria-Hungary	.1	166
Japan	.3	189	Belgium	1.9	1,120
Switzerland	.6	311	France	12.9	12,582
Perforated papers, with designs:			United Kingdom	1.2	1,180
Germany	20.0	7,769	Switzerland	.3	344
Austria-Hungary	.2	100	Wall paper:		
France	13.2	5,105	Germany	156.4	7,577
United Kingdom	5.1	1,170	Belgium	51.1	15,718
Japan	2.8	1,087	United States	.3	85
Paper in narrow strips (serpentine and telegraph rolls):			France	86.9	29,930
Germany	2.8	558	United Kingdom	52.0	16,952
France	2.2	448	Netherlands	5.9	1,127
United Kingdom	2.6	528	Switzerland	1.2	649

The following is a comparative statement of the value of Spanish imports of paper for the first 10 months of 1912 and 1913:

Articles.	1912	1913	Articles.	1912	1913
Paper pulp	$679,054	$987,304	Cigarette paper	$16,578	$44,761
Roll paper	138,427	156,810	Paper bags	1,588	3,446
Wrapping paper	88,798	44,819	Manufactured envelopes	30,007	32,694
White and colored printing and handmade	32,705	28,040	Wall paper	82,687	81,273
Coated and lithographic	23,214	54,172	Ruled paper	36,572	41,299
Parchment and waxed paper	22,775	23,771	Tarred paper	1,238	1,376
Photographic, sensitized	30,250	47,760	Cloth-lined papers	2,776	7,823
Perforated paper	12,878	14,412	Cardboard, pasteboard, etc	73,957	72,573
Paper in narrow rolls	1,668	4,287	Plain card and pasteboard boxes	4,708	6,961

Imports from the United States, as shown by the above table, give the paper stock, pulp, cuttings, rags, etc., as $5,104 only for the year, while the manufactured paper amounts to but $4,059 for the same period. These figures are those of the Spanish customs.

HOME PRODUCTION OF RAW MATERIALS.

Clean cotton and linen cuttings from more than 200 textile establishments of Catalonia furnish a large part of the better grade of raw material for paper making in the Barcelona district in the finer handmade, watermarked, and cigarette papers. Some admixture of old rags, discarded hemp-soled shoes, and rope and paper waste is also used.

The ordinary book and news print is made from the extensive importations of wood pulp and the somewhat smaller supplies of same which are drawn from the forests of the Pyrenees, while the ordinary and better grades of wrapping papers are made from straw and the usual fiber ingredients of low-grade wood pulp, and from the poorest qualities of colored rags.

Vegetable fibers used in the manufacture of paper in Spain are those of wood pulp; rye, oat, wheat, and barley straw; and esparto, the latter being in use only since the middle of the nineteenth century. All contain intercellular matter to the equal of 30 per cent or more of their bulk. This is destroyed by strong chemical treatment under high temperatures, the value of any vegetable product for this purpose—of which esparto ranks among the highest, and is, furthermore, a product of Spain and near-by north Africa—depending upon its strength and elasticity after such treatment. Rice straw, where available—in the Tortose, Tarragona, and Valencia districts—is used there locally for paper manufacture, and in its rough, uncleaned state is normally quoted at 25 pesetas ($4.50) per ton of 2,204.6 pounds.

ESPARTO GRASS.

Esparto, or Spanish grass (*Stipa tenacissima*), is indigenous to southern Spain and north Africa, growing to a height of 3 feet or more in sandy ferruginous soils. It has been used for centuries for ropes, mats, baskets, ships' cables, etc.

For paper making the leaves are gathered in Spain before maturity, during the summer months, at the rate of 200 to 300 pounds per day, at an average cost of 30 cents, for each individual laborer. Esparto may be cultivated from seed, but does not furnish a profitable crop for a dozen years after sowing.

Another variety, the *Hygeum spartum*, is also grown, but takes second rank. It is probable, however, that much of the exports under the generic name of esparto include a fair amount of the latter variety.

Esparto is largely grown on the semisterile soil of the rugged hills in the interior of the Provinces of Valencia, Murcia, and Almeria, its manipulation before being baled and shipped being accomplished by women and girls to a very large extent. The better grade of esparto grass, of the two commercially recognized varieties, gives a return of nearly 55 per cent of its gross weight in fiber suitable for the manufacture of paper.

In the seasons of 1911, 1912, and 1913 there was a notable shortage of esparto in the Almeria district, due to an excessive drought, and the total shipments from Spain fell from 41,750 long tons in 1910 to 34,969 long tons in 1911 and 36,114 long tons in 1912.

The use of esparto grass for paper manufacture was conceived by the French, and has increased somewhat in Spain in recent years, but most largely in Great Britain, where it was introduced in 1857, and to which country the principal shipments of the raw product is made each year from Spanish ports.

Before being used in Sinclair's boiler the esparto, as shipped from Spanish and African ports, requires a thorough cleaning of its impurities, chiefly roots and alien weeds, which may have been gathered with it.

In 1911, the last complete returns available, 15,076.3 long tons were exported from Almeria, 18,042.2 long tons from Aguilas in Murcia. In all 34,960 long tons were exported from Spain in that year, valued at 4,199,191 pesetas silver ($755,854).

Jute, hemp, and manila papers have little market in Spain in their highest form, and what are produced and imported are generally of the bogus variety, or of so thorough an admixture of baser materials that they are practically unclassable as the genuine article.

WOOD PULP.

Wood pulp is chiefly imported from Norway and unworked logs from Russia and Black Sea ports. The local timber so used is from the forests of the Spanish slopes of the Pyrenees and, to a smaller extent, from other forest regions of the Peninsula. The trade favors importation, by reason of the low duties on the raw material and the cheaper transport by sea than the making use of home-grown supplies, which cost more to land at the mills on account of costly rail or land transport, unless by chance the mills are located near forest tracts, which they seldom are here.

Imported wood pulp reaches the Spanish market in sheets, wired without wrapper, or sometimes wrapped in burlap in bundles of 200 kilos (440 pounds). Each slab of between a quarter and half an inch in thickness has numerous perforations which supposedly prevents its use for other purposes than remaking into sheet and roll paper, thus avoiding the duty which would be assessed upon it as cardboard. Prices for the crude article run from 200 to 300 pesetas ($36 to $54) per long ton.

EXPORT STATISTICS.

The following table shows the quantity (in tons of 2,204.6 pounds) of paper and paper products exported from Spain during 1911, by articles and countries:

Articles and countries.	Quantity.
Paper in rolls:	*Tons.*
Canary Islands	31.7
Argentina	185.8
Belgium	409.3
Colombia	3.9
Costa Rica	4.8
Cuba	83.7
Chile	.5
Ecuador	5.9
Philippine Islands	19.2
France	8.3
Gibraltar	1.6
United Kingdom	3.3
Netherlands	36.1
Italy	.1
Morocco	6.6
Mexico	8.8
Panama	2.8
Peru	.2
Portugal	.3
Porto Rico	2.1
Dominican Republic	6.9
Uruguay	.7
Venezuela	.4
Handmade paper:	
Canary Islands	20.9
Fernando Po	2.0
Germany	7.0
Argentina	223.3
Brazil	1.0
Colombia	11.7
Cuba	72.3
Chile	.7
Ecuador	1.1
United States	.25
Philippine Islands	80.5
United Kingdom	.1
Guatemala	.5
Italy	.2
Morocco	2.9
Mexico	4.7
Portugal	.4
Porto Rico	.4
Uruguay	31.9
Venezuela	8.6
Letter paper and envelopes:	*Tons.*
Canary Islands	2.9
Argentina	7.3
Bolivia	.1
Costa Rica	.2
Cuba	15.7
Chile	.3
United States	2.6
Philippine Islands	4.5
France	.2
Morocco	.1
Mexico	.2
Panama	.3
Peru	.4
Portugal	1.0
Danish West Indies	3.4
Cigarette paper:	
Canary Islands	53.8
Ceuta	7.3
Mellila	3.2
Germany	23.4
Algeria	1.3
Argentina	41.9
Bolivia	1.2
Brazil	4.7
Colombia	48.4
Costa Rica	21.7
Cuba	607.2
Chile	135.6
Ecuador	35.6
United States	6.3
Philippine Islands	49.98
France	3.9
United Kingdom	12.1
Guatemala	7.6
Netherlands	1.2
Honduras	8.9
Italy	6.5
Morocco	14.7
Mexico	440.2
Nicaragua	11.5
Panama	20.9
Peru	91.9
Portugal	52.2
Cigarette paper—Con.	*Tons.*
Porto Rico	28.1
Dominican Republic	6.3
Uruguay	8.2
Venezuela	153.9
Dutch East Indies	2.6
Music paper:	
Germany	.2
Argentina	4.7
Austria-Hungary	.2
Brasil	.5
Cuba	2.0
Philippine Islands	1.8
France	.8
United Kingdom	.2
Italy	.3
Mexico	1.0
Portugal	1.4
Porto Rico	.5
Wrapping paper:	
Canary Islands	28.7
Ceuta	2.1
Fernando Po	1.4
Mellila	2.1
Germany	.6
Argentina	12.6
Bolivia	.1
Colombia	1.8
Cuba	261.0
Chile	.2
Philippine Islands	90.2
France	13.3
Morocco	.4
Mexico	1.2
Panama	1.6
Portugal	.3
Porto Rico	740.5
Venezuela	.6
Miscellaneous (varieties not designated):	
Canary Islands	2.9
Ceuta	1.0
Mellila	2.3
Germany	.5

Articles and countries.	Quantity.	Articles and countries.	Quantity.	Articles and countries.	Quantity.
Miscellaneous—Contd.	*Tons.*	Pasteboard—Contd.	*Tons.*	Pasteboard, etc.—Con.	*Tons.*
Argentina	26.4	Chile	8.8	Colombia	4.9
Cuba	54.9	Ecuador	.5	Costa Rica	1.3
Chile	2.5	United States	2.5	Cuba	87.2
France	8.0	Philippine Islands	.1	Chile	7.0
Italy	5.4	France	1.4	Ecuador	.7
Morocco	3.3	Morocco	2.4	Philippine Islands	1.7
Mexico	.3	Mexico	10.7	France	.8
Portugal	4.0	Panama	.8	Italy	.3
Porto Rico	184.4	Portugal	.6	Mexico	22.2
Dominican Republic	1.2	Uruguay	4.9	Panama	1.0
Uruguay	8.6	Pasteboard, in shapes and in boxes:		Portugal	2.5
Pasteboard:		Canary Islands	7.9	Porto Rico	.5
Canary Islands	13.5	Argentina	18.0	Dominican Republic	.8
Argentina	94.3	Belgium	.7	Uruguay	1.6
Brazil	.5	Brazil	.6	Venezuela	.1
Cuba	5.3				

The total value of Spanish paper exports for the year 1911, as classified above, is 6,646,336 pesetas ($1,196,341). The values of paper exports for the years 1912 and 1913, by the classes above shown, are $1,374,926 and $1,239,084, respectively.

The following is a résumé of Spanish paper exports for 1911 to the United States, Philippine Islands, and Porto Rico, the quantity being shown in the metric ton of 2,204.6 pounds and the value in United States currency:

Exported to—	Quantity.	Value.
	Tons.	
United States	11.8	$3,322
Philippine Islands	248.1	48,823
Porto Rico	956.6	108,242

The statistics of Spanish paper imports, by classes, show as plainly as possible the lines in which the United States could hope to compete. Low-grade printing papers and paper stock (raw materials, old rags, cuttings, fibers, etc.), is either produced or controlled locally, or, in the case of wood pulp, supplied by the northern European countries at very favorable terms and also under encouraging transport conditions.

The probable development of American trade in paper with Spain narrows down to such specialties and novelties as are preeminent in quality and price among American manufactures—writing and fine catalogue papers, bond and imitation bond, carbon papers, cover papers, and the like. All these specialties, though often quoted at high prices, can augment their sales, but it is doubtful if they will ever reach very great proportions, in view of the competition of the usually lower-priced article of European manufacture and the custom of the European manufacturer of low-priced goods to copy or substitute for higher grades with something manifestly inferior. In addition, there is the comparatively small local consumption, Spain ranking well down the list of paper users among European countries.

The fact that flat papers of larger dimensions than 17.75 by 22.4 inches pay a higher rate of duty than the smaller sizes works against the importation of flat papers of the larger stock sizes usually sold in the United States as fine writing and print papers. This, of course, works as disadvantageously for importations from other countries and is another powerful encouragement for the Spanish paper industry.

PAPER-TRADE PUBLICATIONS.

The Boletin-Ergos, Madrid, is the most important weekly technical publication in Spain, dealing largely with the paper-making industry. Its circulation approximates but 1,200 copies per issue, but most of the advertising it carries (chiefly of German and British manufacturers of paper-making machinery and supplies) is evidently on the yearly contract basis; hence the advertisers benefit from the cumulative circulation, which probably reaches all the heads of the paper-making industry and paper trade in Spain. It claims also to have many readers throughout Latin-American countries, being the only journal in the Spanish language thus specializing. Recently an edition was printed on esparto paper, as a means of popularizing its use in the Spanish printing trade, the stock being furnished by La Papelera Española.

El Boletin de la Industria y Comercio del Papel, Madrid, deals with the technical, manufacturing, and financial aspect of the industry in Spain.

A publication dealing with paper in Spain and its relation to the customs tariff which is most worthy of note is El Papel en su Aspecto Arancelario, by Nicolas M. de Urgoiti, Vocal de la Junta d'Aranceles y Valoraciones, Madrid, marzo, 1911; Imprenta Alemana-Feuencarral, 137; Papel "Indian Oxford" Fabricado por La Papalera Española. This document is further remarkable, as is shown by the imprint, from being printed on "India" paper.

A significant side light thrown upon the story of the development of the paper-making industry in Spain is the successful operation of the paper-making school—Escuela Torico Préctica de Papel—at Tolosa, in the Province of Guipuzcoa. The director general is Señor Nicolas M. de Urgoiti. There were 21 graduates placed in positions in the paper industry in Spain in 1912.

PAPER-TRADE COMBINATION.

In the month of January, 1914, an accord was entered into between 18 paper mills, the property of the Papelera Española, and 16 independent mills, and a trade association was formed which was intended to regulate selling prices of standard and competitive varieties and grades of Spanish-made papers. The association, known as the Central Papelera, has its headquarters at Madrid.

The companies and individuals to whom the first steps in the founding of this organization were due are as follows: Louis Montiel; J. Soséy Cia.; Portu Hermanos y Cia.; Manuel Vancello; Papelera del Araxes; Salieto y Sala; L. Portu; Frederico San y Hnos.; S. Mendia; Viuda Querico Casanovas; Soto, Tuduria y Cia.; Papelera Española.

The new prices are to apply on ordinary and medium-grade printing papers, satin-finished papers, rag papers, pseudo-English papers (generally referring to laid writings), supercoated "art" papers, kraft papers, and wall papers.

Quantity discounts, which may be changed from time to time, according to varying market conditions, size, color, quantity, and weight, are to be an additional 1 per cent only up to 2,000 kilos (4,408 pounds); 2 per cent from 2,000 to 5,000 kilos (4,408 to 11,020 pounds). Payments to be made net 90 days from date of invoice, with 1½ per cent if within 30 days.

Prices and terms granted to paper importers vary according to the kind of representation which the manufacturer seeks. Stocks sold outright are governed as to price, and somewhat as to terms, by quality and quantity. Since the importer is almost without exception a wholesaler, the terms which he demands are something in excess in point of time, discounts, and price than he is obliged to grant the trade to which he sells.

The importing wholesaler, on competing lines at least, is obliged to equal and better the terms granted by the Spanish trade combination of manufacturers, as outlined above, and still have a margin of time and discount to his credit, to say nothing of a profit on the trading price.

For foreign purchases, as from the United States, where the ordinary time transit for freight may be anywhere between three and six weeks, all told, a four months' credit would be none too ample unless the exporting manufacturer would be willing to equalize this by increased cash discounts for 30, 60, and 90 days.

It is probable that certain German manufacturers of paper stationery novelties participate in concert with their Spanish representatives, in which case the issue becomes merely one of a consignment account, this in turn cutting the profits of the Spanish distributor.

The procedure in either of the above cases is based entirely upon the possibility of moving the stock within a given time, and in a country like Spain, where the small dealer, who to the wholesaler is the consumer, buys only for daily and urgent needs, the distributor who gets his stock in the first instance from the manufacturer must, of necessity, be in a position to finance the series of transactions of buying, stocking, selling, and collecting, or look to the manufacturer to assist him therein.

The question of handling the Spanish paper market is thus shown to be one of financing the operation as well as the actual selling of the merchandise; there is apparently no other way of reaching the consuming printer or stationer than through the wholesaler or a specially appointed representative or resident agent.

The following members of the Barcelona Chamber of Commerce and Navigation have "Paper and its applications" under their special charge in all that relates to the question of customs duties and regulations: D. Juan Capdevila Raurich; D. Gustavo Gili; Sra. Viuda de W. Guarro; D. F. Puig y Alfonso; D. Pedro Alier y Amar; D. Ramon Sopena; and Sres. Sucrs. de Torras Hnos.

PAPER PRICES.

The consumption of paper of all classes in this consular district can only be surmised on broad lines. In area, covering perhaps one-third of the entire Spanish Peninsula, with Barcelona and its satellite suburban towns and cities forming together the most populous and progressive elements in Spain, it is safe to presume that here lies the greatest per capita consumption. When Bilbao, Zaragoza, San Sebastian, and the other chief centers of population in north Spain, which are also in the Barcelona consular district, and the coast cities of Tarragona, Valencia, Malaga, and Seville are also included, and these as well as most other cities and towns of Spain largely draw their supplies from Barcelona are included, it may be considered that by far the largest total of consumption, as also of production, of paper is tributary to Barcelona.

The following are the average wholesale market prices of current varieties of Spanish-made papers at Barcelona:

News print, in rolls	per pound		$0.065
Cigarette papers	do	$0.15 –	.18
Ordinary wove printings	do	.0325–	.0675
Straw wrapper	do		.02125
Gummed papers	do		.14
Cut letter (quarto single)	per ream	.81 –	2.07
Typewriter	do	.85 –	2.00
Music paper (ruled)	do		27.50
Parchment papers, 17.3 by 22 inches	do	1.15 –	2.30
Cloth-surfaced writing, 17.3 by 22 inches	do	1.62 –	2.88
Cigarette papers, flat, 17.3 by 27 inches	do		2.20
Cigarette papers, packages, cut, 50, 100, and 300 each	per gross	.60 –	.90

Large lots of flat and roll printing papers, when taken at the mills outside the Barcelona district, are taxed further with freight rates by rail averaging from $3 to $5 per ton.

Wholesale prices of imports of foreign papers averaged, on the basis of Spanish customs statistics, for the first 10 months of 1913, as follows:

	Price per pound.		Price per pound.
News print in rolls	$0.055	Manufactured paper bags	$0.136
Wrapping	.055	Manufactured, envelopes	.223
White and colored print	.119	Wall papers	.146
Coated and lithographic	.119	Fancy letter	.355
Parchment and waxed papers	.082	Tarred papers	.177
Photographic, sensitized	.45	Cloth-lined papers	.26
Perforated	.177	Cardboard and bristol, including pasteboard	.064
Narrow roll, telegraphic, etc	.091	Folded cardboard boxes (cartons)	.086
Cigarette	.18		

The following table shows the standard sizes and weights of the various classes of paper chiefly in demand in the Barcelona consular district:

Kinds.	Dimensions.	Weight.	Kinds.	Dimensions.	Weight.
	Inches.	*Pounds.*		*Inches.*	*Pounds.*
Newspaper stock in rolls, width	27.5 to 39.3	....	Ledger paper	15.7 by 31.4	30.8
Wrapping in rolls, width	39.3 to 55	....	Do	15.7 by 31.4	35.2
Wrapping, straw and other, bundles	14.5 by 19	132	Do	18.5 by 25.6	57.2
Book and news	27.5 by 39.3	44.9	Bond and linen papers	17.3 to 22	8.8 to 17.6
Do	27.5 by 39.3	52.8	Do	17.3 by 23.6	13.2
Do	27.5 by 39.3	61.6	Typewriter, laid and wove	17.3 by 22	13.2 to 17.6
Do	19.7 by 27.56	66	Gummed papers	17.3 by 25.8	22.04
Do	19.7 by 27.56	74	Blotting paper	19.7 by 25.8	41.8 to 88
Do	19.7 by 27.56	48.5	Cardboard	19.7 by 25.8	88 to 220

Sizes of cut papers for commercial correspondence, typewriter papers, quarto, and legal size sheets do not vary greatly from American dimensions, but there is always a percentage of difference in the flat sheet which, if it should happen to be a little larger than that which is current here, would make that trifle extra in price, which would mitigate against the introduction of sizes which might cut to waste. The following are the current dimensions of certain characteristic specialties of Spanish manufacture: Handmade notarial and stamped papers, single and double sheets, 9 by 12.75 inches; typewriter and commercial letter papers in quarto, ruled or plain, single or double, 8.25 by 11 inches; ruled music paper, 8.25 by 12.25 inches; commercial "note," single or double, 4.75 by 6.5 inches; society "note," various sizes, usually sold boxed in papeterie form: carbon papers, standard sizes, but varying slightly from 8 by 10.5 to 10.5 by 12.5 inches.

The demand for wall paper, as a general rule, is for those selling at low prices, usually of German, French, or English origin, although some costlier papers are found in the wealthier homes. It is a fact worthy of mention that the plain whitewashed or painted walls so commonly used operates to a large extent against the possibility of increasing wall-paper sales in this market.

PRODUCTION OF LOCAL MILLS.

There is a distinct specialty among the manufacturers of paper products here which is defined by the industry devoted to the rough cardboards of straw or other vegetable products as "cartons," as well as that of a finer grade coming well within the classification of card stock but used for the manufacture of playing cards. This commerce reaches large proportions locally and throughout the Peninsula, as well as being extended to Porto Rico, the Philippine Islands, and Latin America.

Straw wrapping papers, resembling much in size, color, and qual- the straw "meat" papers of the United States, are made extensively in the region tributary to the Barcelona district, and the article is even exported to the Philippine Islands, the West Indies, and Central and South America.

Cork paper for cigarette ends is largely exported by manufacturers near Barcelona. The sheets are 4.25 by 6 inches, with 250 sheets to the inch. Four qualities are commonly marketed, selling as follows per 1,000 sheets f. o. b.: Gold band, $4.82; blue, $3.67; red, $2.07; white, $1.25. Large orders carry a discount of 10 per cent, and strips for cigarette tips only are sold in three qualities, running in price from $5.79 to $10.62 per 100,000 tips.

Of the 200 (approximately) paper mills in Spain by far the largest proportion is in Catalonia and Vizcaya, the bulk of the industry being further centered in the neighborhood of Tolosa, Madrid, Zaragoza, Seville, Valencia, Segovia, Gerona, Tarragona, and Barcelona. The largest total output is from the region immediately around Barcelona, with Tolosa in the second rank, from 12,000 to 15,000 long tons being considered as the normal annual output of the best equipped mills.

Silk tissues for orange wrappers are produced to the extent of 2,500 long tons or more for use in the Valencia district, Mallorca, and other fruit-producing centers, and small quantities are exported. The best varieties, when used as orange wrappers, practically seal up the fruit from the outside air and are commonly considered as being nonporous. For this reason these papers have practically kept out foreign-made competing lines which do not possess that quality. These papers from abroad are further handicapped with customs dues approximating 1½ cents per pound.

The size of silk tissue for fruit wrappers is 52 by 76 centimeters (20.5 by 29 inches), and is sold in 30-ream parcels of 500 sheets to the ream, which weigh approximately 155 pounds to the parcel. There are various grades and colors, and the orange crop of the Valencia district alone requires practically the entire supply.

The annual paper production of the Barcelona district is from 40,000 to 50,000 tons, and it is estimated that 40 per cent is fine printing paper, 40 per cent wrapping, and 20 per cent writing. In addition, above 30,000 tons of wood-pulp paper are manufactured, one-half of this pulp being locally produced from wood of the forests of the Pyrenees and the remainder imported.

SCALE OF WAGES.

There are approximately 4,000 hands employed off and on in the paper mills of the Barcelona district. According to the low-water mark figures of 1911 these employees were divided thus: Males, 1,949; females, 1,413; total, 3,362. Of this number 173 males and 900 females were under 16 years of age.

Night work is comparatively unknown, but 197 males and 8 females are thus permanently employed, chiefly as caretakers, watchmen, firemen, cleaners, etc.

The working day normally averages 10 hours and 40 minutes, with hours slightly longer in summer and correspondingly shorter in winter.

Wages run from an average figure of 4 pesetas 74 centimos for men to 2 pesetas 43 centimos for boys ($0.85 to $0.44); for women and girls, 2 pesetas 43 centimos to 1 peseta 47 centimos ($0.44 to $0.26).

Paper of all kinds imported at Barcelona has been small and since this is the chief gateway for imports of all kinds, one of the richest and most progressive cities of Spain, as well as the largest, no possible explanation can be given except that the trade has not been pushed and the cheaper article of European manufacture, which might in many cases be supplanted, has been allowed to rule the market. France, Germany, and the United Kingdom share in the trade in the order named, and even the Netherlands are represented by imports of most of the classes of paper listed in the customs statistics. The struggle in this market is most keen, and foreign trade here is forcibly combated by the powerful local paper interests.

IMPORT CONDITIONS.

If there has been any notable change in the import trade in paper in recent years, it is that it has fallen off in certain lines because the Spanish paper industry has made importation more difficult, as well as by the expenses of transportation, sea freights, port charges, and customs duties. In spite of this it is not to be expected that Spanish makers will attempt to produce the high-class lines of novelties and specialties so largely known in America, and in this respect there seems to be an increasing demand for just that sort of thing which perforce will be catered to by outsiders.

The changes in import trade indicate that Germany, Austria-Hungary, and the Netherlands are now factors in high-grade competitive lines, whereas the trade in similar lines was formerly exclusively British and French.

Shipping and dock-handling facilities in the port of Barcelona for all classes of imports are modern and adequate, and most heavy freight, which includes paper stock and most kinds of printing papers, arrives by sea. Cargoes of European origin, however, pay in the port of Barcelona port and dock dues of a lower rate than those from across the Atlantic. This is hardly a factor except in large bulk goods, but is another of those little charges which in the aggregate are against the importation of many classes of merchandise originating in the United States.

It is to be remarked that many German lines are represented in this market by direct representatives of that nationality, or by the parent house being in direct association with a Spanish representative. This is also true of those of French origin, but less so with English lines. Particularly does this apply to paper-making machinery and such raw product as is imported. The only observation which can be made further with regard to the representation of American-made lines of paper is the desirability of some such procedure, if not by a single manufacture, at least in association with other American firms of noncompeting lines. It would be desirable in this case that in addition to the American representatives on the spot they have a proper staff of Spanish employees, perhaps travelers also, who could approach the trade on terms of intimacy that might not be possible for the stranger unaided. The fact is, however, for a constant representation of American-made papers, the American located here, with his hand directly on the pulse of the market, its fluctuations and its needs, would in many cases be able to develop a trade which might otherwise not be supposed to exist. At least for the beginning of such a campaign the idea would seem to be worth the time, trouble, and expense involved.

Prices and terms in the paper trade are more or less fixed by custom and tradition, and such changes as might come up from time to time could only be met in a manner to ward off undue competition by a complete first-hand knowledge, which would make itself felt to the man on the spot. There is the usual decided advantage in this respect in dealing with German, French, and British manufacturers who may have a more or less direct representation here, and the European exporter of paper product to Spain has ever been known to take advantage of the wishes of his clients by extending the terms of sale and time of payment wherever the financial risk seems a good one and future possible business seems worth cultivating.

Another feature of this and other trades often overlooked is that in most of the large cities of the Latin countries of Europe there are usually to be found large British and German colonies of business men representing one or another of the products of their own countries and naturally favoring the specialties of their own land, as well with reference to their business as their private interests.

Sometimes these colonies have their own local chambers of commerce and business clubs and organizations, and these, again, are factors in promoting national trade in a stimulative manner, which results in a sort of automatic encouragement to all classes of goods manufactured at home by their own people. This may be considered a side light of no little importance in trade development.

While customs dues affect the prices of high-grade carbon, blotting, printing, and writing papers more than they do a more common product, it is hardly to be foreseen that the comparatively small increase per sheet or per envelope, or even per box (papeterie) of novelties in social note papers, would seriously damage their prospect of being introduced. Their sales, however, would be confined to the few firms of Madrid and Barcelona who make a specialty of high-class stationery. Superior cloth and other fancy surfaced papers for private correspondence and tinted bond and other papers for commercial use, if sold in bulk or quantity, would naturally be more seriously affected, but even then the increased price per unit would be infinitesimal by reason of the imposition of any reasonably conceived customs dues.

For the other classes of writing and printed papers, such as are in common use among those to whom price is the prime factor, there would be a decided disadvantage in attempting to compete with the Spanish-made product.

TARIFF EXEMPTIONS.

In this connection, apart from customs duties, vegetable fibers, such as are made use of in paper manufacture, benefit from exemption of the tonnage or transportation tax which is imposed on other heavy goods, either raw or manufactured, in the port of Barcelona. This favors the home manufacture of paper in the commoner grades. If such fiber is brought to Spain, in ships of any nationality, having loaded a full cargo in Spain on the outward voyage, or discharging a full cargo in Spain on the return voyage, it benefits from this exemption. This has a bearing upon the import of certain classes of paper in that the raw material thus benefits from what is practically a reduced rate of entry as compared with that which is paid by manufactured paper.

Communication and shipping facilities by sea between the United States and Spain, so far as port accommodations are concerned, are excellent. From Barcelona, Valencia, Malaga, and Cadiz there are two regular lines of Spanish steamships to New York and to New Orleans and vice versa.

There is frequent cargo boat communication as well between Atlantic and Gulf ports, the latter largely used for the transport of raw cotton from the Southern States—Barcelona being the fourth cotton port of Europe—and would thus be available for package freight if shipped from western paper mills by the Mississippi or by rail.

By transshipment there are direct and regular communications by sea from the chief ports of northern Europe, both from the Continent and from the United Kingdom, there being direct services from Liverpool and London to Barcelona, from Hamburg, Antwerp, and Rotterdam, while a considerably smaller volume of transshipments reach Barcelona through Genoa and Marseille.

The exports of paper and paper-making materials from the Barcelona consular district to continental United States and its noncontiguous territories for 1912 and 1913 are as follows:

Articles.	1912	1913	Articles.	1912	1913
CONTINENTAL UNITED STATES.			PHILIPPINE ISLANDS.		
Cigarette paper	$1,602	$1,235	Cigarette paper	$6,172	$11,242
Cork paper	39,157	75,904	Wrapping paper	21,135	15,961
Paper stock:			Stationery	8,449	12,777
Cotton cuttings	7,631	14,005			
Gunny scrap	31,399	26,056	PORTO RICO.		
Phormium		284			
Old rags		11,806	Cigarette paper	16,003	13,722
Old rope	2,997	7,678	Wrapping paper	40,817	50,196

GIBRALTAR.

From Consul R. L. Sprague.

All the paper consumed in Gibraltar is imported, as there are no paper factories in this town. The paper imported is employed solely for printing, writing, and wrapping, 75 per cent of which represents the cheapest and 25 per cent that of the medium quality.

The following is a list of the countries from which paper is imported: 50 per cent from the United Kingdom, 20 per cent from the Netherlands, 15 per cent from Germany, 6 per cent from Spain, 5 per cent from Austria-Hungary, and 4 per cent from France.

Because of its superior quality American paper ranks first in the estimation of all dealers here. Its importation, however, is greatly restricted owing to its high cost, compared with the cost of paper from foreign markets. American paper is obtainable in Gibraltar through branches of American firms established in Liverpool and London.

No official statistics are kept of the amount of paper imported, but the following are the approximate quantities consumed yearly:

News paper (unglazed), 12 tons; news paper (glazed), 3 tons; printing, for general purposes, 4 tons; parchment, white and colored, principally used for wrapping chopped tobacco and cigarettes, 20 tons; wrapping paper for grocers and milliners, 30 tons.

The sizes in demand are 75 per cent of the English standard size, double foolscap, 20 by 30, and 25 per cent of special sizes, demanded by local consumers. As to quality and weight, bulky and heavy paper is preferred. With the exception of printing and wrapping paper, the demand for all other is very small. Owing to the climatic conditions of this town, wall paper is used to very little extent.

The leading English and local stores and most of the commercial firms obtain all their supplies of books, wrapping paper, and stationery direct from England.

There is no duty of any description imposed on paper. The terms usually granted to importers are as follows: 50 per cent cash on arrival of goods, 50 per cent at 3 months, 2 per cent being allowed on latter if payment is made within 30 days.

Commercial travelers representing Spanish firms regularly visit this market. They receive small orders from grocers, confectioners, milliners, and also from establishments who advertise on their wrapping paper (printing in Spain being cheaper than here).

JEREZ DE LA FRONTERA.

From Consul Paul H. Foster.

There is quite a large consumption of paper here of the sorts used in printing offices for circulars, stationery, books, etc., but the greatest volume, naturally, is for wrapping purposes in the stores. This latter is usually of very poor quality.

The paper sold in this market is mostly of Spanish manufacture, a few high-grade papers for correspondence, and some parchment being imported from England and Germany. This not being a port of entry, no figures as to the amount imported are obtainable, but the volume directly imported is negligible, such imported paper as is used being bought from wholesale dealers in the larger centers. There is one concern here that jobs paper, and does lithographic and printing work in a small way, but the larger retail stores and the printing shops buy their supplies mostly in other cities in Spain. This point would hardly provide sufficient local business to justify a branch or distributing depot, although it might prove a good feeder for one located in southwestern Spain.

MADRID.

From Consul F. T. F. Dumont.

During the last 10 years Germany has taken the leading place in sending paper to Spain. As stated in the annual report for the year 1912 from this office, "Germany not only competes (in Spain) with each country in articles which it considers its specialty, but in spite of the tariff she competes with Spanish manufacturers in the commonest goods they make." This statement applies to the paper trade as well as to others. Small quantities of all kinds of paper and of all qualities are imported from Germany, but her principal exports to Spain are roll, packing, tinseled, paraffin, serpentine, ledger, wall, cardboard, and account paper. France is the leading competitor of Germany, but furnishes a better quality and demands higher prices. Her trade does not aggregate over a quarter that of Germany. In imported writing paper Germany dominates the market. A small quantity in sheets is imported from England, but on account of the high price demanded little is sold. The usual size of sheets imported is 46 by 58 centimeters (18.11 by 22.83 inches), known as "coquille." Some sheets known as "folio," 46 by 65 centimeters (18.11 by 25.59 inches), are also imported. Unless the importer is an old customer English and French houses sell him at 30 days net. German houses usually ask net cash at either 60 or 90 days, although many German manufacturers offer goods at from 4 to 6 months' time, with interest at 6 per cent from the date of shipment. Spanish manufacturers sell wholesalers at 90 days net cash from date of bill or at 30 days with 1½ per cent discount.

Paper from the United States is considered superior to either foreign or domestic paper, but the imports from that country are only of typewriting, manifold, carbon, and letter paper. They are carried in small quantities by a few of the best retailers. The demand is very small on account of high prices. Germany is the only dangerous competitor in supplying carbon paper.

Spanish taste is in a process of evolution as to writing paper, and a higher class for personal and business correspondence is being used than formerly, but the demand for paper of all kinds and qualities is fully catered to by German manufacturers. However, even the best paper in use in correspondence would be considered of very inferior quality in the United States. No business can be done even in medium grades by American manufacturers unless from 60 to 90 days' credit from date of shipment is allowed. If shipments are not made by direct routes the time allowed must be proportionately increased. By reason of the tariff, the high development of Spanish mills, and the manner in which the German manufacturer caters to the small demand for foreign papers the only market in which American manufacturers have a chance is in papers of special kinds and qualities. The quantity required of these will be extremely small.

For some years past, as at present, there has been and is an overproduction of paper. At a meeting of Spanish paper manufacturers held in Madrid in January, 1914, a combination was formed called the Central Papelera, with the main office at Calle Almagro, 2, Madrid. Nearly all of the great paper manufacturers, including La Papelera Española (the capacity of whose mills is estimated at 36 per cent of all Spanish mills), signed an agreement. This agreement requires that Sunday work be stopped, closes certain mills, reimbursing the owners on a fixed scale, limits the output of mills which are to continue in operation, and fixes the prices at which goods may be sold. A resolution was passed that the Government be petitioned to allow a drawback of the amount of the duty paid on all raw materials used in the manufacture of paper, whether printed or not, that is afterwards exported to foreign countries.

The mills at Valladolid and Leon, making two of the six mills in this consular district, had been closed for some time when the Central Papelera was formed. Under the trust agreement another—that at Tajuna, near Madrid—has been closed; 25 corporations, including Tajuna, signed the agreement. Of these 25 corporations, it has been agreed that 11 shall manufacture certain kinds of paper, that 6 mills shall manufacture all other kinds of paper required in certain quantities and qualities by the Spanish trade, closing six mills and leaving foreign manufacturers to supply certain kinds and grades of which the consumption is small and in which the Spanish mills can not or will not compete.

MALAGA.

From Consul Robert Frazier.

As no paper of any kind is manufactured within this consular district, comprising the four Provinces of Granada, Jaen, Almeria, and Malaga, all of that used here is either brought from other parts of Spain or imported from foreign countries. Customhouse statistics for 1912 give a total of 55 tons of all grades imported during that year, but no figures relating to the amount of domestic paper used are available. As, however, in the opinion of local dealers, the total annual paper consumption in Malaga must be in the neighborhood of 1,000 tons or more, it is evident that imports are relatively insignificant.

There are no wholesalers or jobbers in the paper business here, so that foreign importers are obliged to sell direct to retailers and job-printing establishments, secure local agents, or, as they generally do, send traveling salesmen from their home factories. The terms usually conceded are 2 per cent discount for cash within 30 days, or credit for 60 or 90 days, and these conditions would have to be met by American exporters unless their products presented some marked advantage in quality or price over those of the German, Belgian, or British goods now imported here.

From Consular Agent Bartley F. Yost, Almeria.

This office is reliably informed by local stationers that practically the entire supply of all kinds of paper used in the business establishments and administrations of the city and Province of Almeria is furnished by jobbing houses of Madrid and Barcelona, chiefly the latter. There is sold here an insignificant quantity of American-made carbon paper, blotting paper, and note paper. It is not imported directly but is furnished by the jobbing houses of Barcelona. Dealers declare that it is more advantageous to secure their stock in this way than to deal directly with importers. Samples of paper have been sent to local dealers by American exporters, with little or no success, except in the case of carbon paper. Supplies are purchased here in such small quantities by the printing houses and stationers that direct importation has been found inadvisable.

SEVILLE.

From Consul Chas. W. Winans.

There is no importation of paper or wood pulp from the United States into this consular district. American paper is unknown here, partly owing to the lack of facilities offered by American manufacturers and exporters. The importation into this region of foreign-made papers, small as it is, has been accomplished only through the persistent efforts of traveling salesmen, who have quoted prices "placed in Seville salesroom." These exact quotations, which obviate the necessity of inquiry and estimate on the part of the local dealer and enable him at once to compute his profit on sales, go far toward accounting for the respective imports of foreign papers. The improvement in quality and the increase in supply of domestic paper make doubtful the future development of the local market for products of foreign mills. The Spanish dealer buys from the best available source, changing only when it is essentially advantageous to do so. As the Spanish paper mills are enabled to offer inevitably greater facilities to the dealer, they will doubtless tend gradually to displace foreign competitors.

VALENCIA.

From Consul Claude I. Dawson.

The Valencia region is said to be a small consumer of all kinds of paper ordinarily used in official, commercial, professional, or social life. In common with all Spain as a producer of paper, the district is a poor market for foreign products.

Aside from paper pulp, customhouse statistics for 1912 showed less than 200 tons of foreign paper and paper products imported during that calendar period. This is about 3 per cent of the estimated production of all classes of paper in the entire district, but even at that the statistics indicate more active foreign business than the conditions of local trade and the opinions of large users justify. In substance, the opinion of manufacturers, printers, and stationery dealers is that the only foreign papers used here are limited quantities of bond, ledger, and linen stock of the better grades, chemically prepared paper, paraffin , news, photographic, novelty, cigarette, and wall paper.

Silk paper for wrapping oranges is made only in one size, viz, 52 by 76 centimeters. Some factories make seven or eight grades, only three of which are extensively used, however, known in the trade as extra white, extra pink, and white No. 1, or cream colored. The pink paper is mostly employed at the beginning of the orange season when it imparts the appearance of warmth of color to oranges still immature and pale, but a general preference is latterly given to white and cream paper as it throws into strong relief the fancy stamping in gold and colors so much in vogue.

The United States shares in the paper trade of the district with less than 5 metric tons of paraffin paper. The only explanation which seems reasonable is that our manufacturers do not solicit business according to the prevailing custom, viz, through traveling salesmen. Dealers say that orders are not given in any other manner, and that it is one of the best reasons why foreign paper continues to be sold. It can be purchased in Valencia on equal terms with Spanish paper made in distant parts of the Peninsula. There is every reason to suppose American manufacturers could share more importantly than at present if the same policy were pursued. But they will probably take the ground that the aggregate business to be done is not worth a special propaganda in this district. If at the same time conditions in other parts of the country are more propitious, it is suggested that this territory might yield some business through the efforts of a general agent in Barcelona or Madrid.

Regardless of conditions affecting the general market for foreign paper, American manufacturers of carbon paper can increase their trade with this district if they really desire to do so. They have only to extend facilities to local business houses for securing goods direct instead of from German distributors. This refers to the matter of credit more than anything else. American paper already has advantages of quality and price over German goods. German wholesalers evidently realize this, because they sell American paper here, shipment to be made from New York.

CLASSIFICATIONS OF PAPER.

Paper is measured in terms of the metric system, weight being expressed in kilos (2.2 pounds) per ream of 500 sheets, or in grams per square meter (10.76 square feet), and dimensions in centimeters (0.3937 inch). The Spanish trust, La Papelera Española, issues sample books of its products, offering a wide choice of styles and factory sizes in light, medium, and heavy weights and a variety of colors. A general classification thereof, showing sizes and weights, may be stated as follows:

Printing paper, in reams, 44 by 56 to 70 by 100 centimeters (17.3 by 22 to 27.56 by 39.3 inches), 8 to 60 kilos (17.6 to 132 pounds).

Parchments, 44 by 56 centimeters (17.3 by 22 inches), 6 to 10 kilos (13.2 to 22 pounds).

Writing and typewriting paper, 44 by 56 centimeters (17.3 by 22 inches), 6 to 14 kilos (13.2 to 30.8 pounds).

Lithograph paper, 52 by 65 to 58 by 84 centimeters (20.5 by 25.8 to 22.8 by 33 inches), 16 to 35 kilos (35.2 to 77 pounds).

Glazed paper, 50 by 65 centimeters (19.7 by 25.8 inches), 10 to 12 kilos (22 to 26.4 pounds).

Cover paper, 50 by 65 and 50 by 70 centimeters (19.7 by 25.8 and 19.7 by 27.56 inches), 27½ and 30 kilos (60.5 and 66 pounds).

Drawing and blotting paper, 50 by 65 centimeters (19.7 by 25.8 inches), 26 and 40 kilos (57.2 and 88 pounds).

Bristol board, 50 by 65 centimeters (19.7 by 25.8 inches), 40, 50, 60, 70, and 80 kilos (88, 110, 132, 154, and 176 pounds).

Kraft paper, in rolls, 55, 90, 100, 105, 110, 120, and 140 centimeters (21.6, 35.4, 39.3, 41.3, 43.2, 47.2, and 55 inches), 120 and 150 grams per square meter.

Wrapping paper, in reams, 29 by 39 to 64 by 58 centimeters (11.4 by 14.4 to 25.2 by 34.7 inches), 3 to 42 kilos (6.6 to 92.4 pounds); in rolls, 100, 110, 112, 120, and 140 centimeters (39.3, 43.3, 44.1, 47.2, and 55 inches), 55 to 120 grams per square meter.

Paper for making fans, 64 by 88 and 67 by 89 centimeters (11.4 by 14.4 and 26.4 by 35 inches), 9½ and 10 kilos (20 and 22 pounds).

Lithograph paper made in Valencia is produced in three classes and 34 grades as follows: For chromos, 13 grades, 52 by 65 centimeters (20.47 by 25.59 inches), 14 to 60 kilos (30.8 to 132 pounds); 4 grades, 52 by 70 centimeters (20.47 by 27.56 inches), 17 to 39 kilos (58.4 to 85.8 pounds). For illustrations, 8 grades, 52 by 65 centimeters (20.47 by 27.59 inches), 16 to 35 kilos (36.2 to 77 pounds); 2 grades 56 by 77 centimeters (22 by 30.3 inches), 20.41 to 25.5 kilos (44.9 to 56 pounds); 2 grades, 56 by 88 centimeters (22 by 34.6 inches), 23.32 to 29.16 kilos (51.3 to 64.1 pounds); 2 grades 66 by 90 centimeters (26 by 35.43 inches), 28.11 to 35.15 kilos (61.8 to 77.3 pounds). Glazed white paper, 3 grades, 52 by 65 centimeters (20.47 by 27.59 inches), 12, 14, and 30 kilos (26.4, 30.8, and 44 pounds).

SWEDEN.

STOCKHOLM.

From Consul General Ernest L. Harris.

The Swedish paper industry during the past 10 years has gone forward by leaps. The export of both wood pulp and paper has increased immensely.

In 1903 Sweden exported 316,124 tons of wood pulp, valued at $9,000,000. In 1912 these figures had increased, respectively, to 812,125 tons and $26,300,000. Of these amounts 323,499 tons were exported to Great Britain, 135,191 tons to France, 97,033 tons to the United States, 83,479 tons to Germany, 19,928 tons to Japan, 9,395 tons to Argentina, and 5,922 tons to Mexico.

The exportation of paper has also increased considerably. In 1903 the exports amounted to 82,300 tons, valued at $4,650,000, and in 1912 to 180,800 tons, valued at $9,605,000. Paper to be used as news paper is the most important article of exportation. In 1912 the amount intended specifically for this purpose was 65,000 tons, valued at $2,180,000. In that year 30,400 tons were exported to Great Britain, 6,900 tons to Australia, 6,300 tons to Germany, and the rest to Argentina, Brazil, Chile, France, China, and other countries.

The second great article of export after news paper is paper intended for packing purposes. Under this heading may also be included paper intended for writing and drawing. The exportations amounted in 1912 to 78,300 tons, valued at $4,765,000. Great Britain, the United States, Germany, and Japan were the principal buyers.

The paper industry of Sweden, at least as far as the production of paper made out of wood pulp is concerned, is in a period of great expansion. Such at least was the outlook until very recently. It is difficult to ascertain at the present time whether the production of chemical wood pulp in Sweden has been diminished by reason of the war. It is reasonable to suppose that the difficulty in getting sulphur and coal will make its influence felt, perhaps to the extent of causing many of the pulp mills to reduce their production until the political situation has cleared. With this possible exception, the outlook has been an expanding one, with promise of good financial returns. The old paper mills have been rebuilt and modernized. Many have been enlarged, and there are even at present two new ones in process of construction.

Through the establishment of direct steamship lines between Sweden, South America, Australia, and eastern Asia new markets for Swedish paper have been opened up.

MARKET REQUIREMENTS.

The paper mills which manufacture the finer kinds of paper do not succeed in meeting home requirements. Certain factories produce the best qualities of fine and medium fine paper for writing, bonds, and ledgers; linen paper; book, Bible, and India paper; also tissue, blotting, and carbon paper. In spite of this considerable quantities of these are imported annually. The demand for good bookbinder's board and board for cards and card systems is also great.

The Germans, who are the principal exporters to Sweden, allow their clients six months' credit. American dealers demand cash on delivery. Payments in three or six months are so common in Swedish business life that others will have to comply with this rule.

The following is an example of the German method of doing business during the war: In August, 1914, the Swedish paper merchants and mills increased their prices by 10 per cent, and gave as a reason for this action that the cost of production had increased and money become dearer. The Germans, however, kept their old prices, and in some cases even lowered them, allowing, on the whole, almost any terms of payment the buyer wished. The natural consequence has been that they have had more business transactions than ever before in this particular line.

There is not the least doubt that a large and profitable trade in the above-mentioned kinds of paper may be established if exporters try to accommodate the buyers as regards qualities, terms of payment, packing, etc. They also require energetic agents to exploit the market. Most of the large paper merchants residing here are agents for German exporters. Another thing which ought to be mentioned in this connection is that all measures and weights must be in the metric system; also, a ream of paper must contain 500 sheets, and not the English 480.

HOME PRODUCTION.

There is an abundance of raw material, especially for the manufacture of wood paper. During the great period of development and consolidation which commenced at the beginning of the century the large wood-pulp and paper factories bought immense tracts of forests at very low prices. This accounts for the fact that the raw material is so cheap. Raw material for finer paper, such as rags, fibers, etc., must, however, be partly imported, and on this account the manufacturing price of the various kinds of finer paper is about the same as the quotations in foreign countries.

Current prices per cubic foot for white-wood logs used for sulphite pulp are as follows: Top diameter of log, 4 inches, 13 öre ($0.035); 4½ inches, 16 öre ($0.043); 5 inches, 20 öre ($0.053); 5½ inches, 26 öre ($0.069); 6 inches, 33 öre ($0.088); 6½ inches, 41 öre ($0.11); 7 inches, 51 öre ($0.136).

Swedish wood-pulp and paper factories are, as a general rule, fitted with modern machinery, almost entirely of Swedish manufacture. The Jonkopings Mekaniska Verkstad, Kristinehamns Mekaniska Verkstad, and Karlstads Mekaniskna Verkstad are the leading machinery firms in Sweden. Most factories are driven by power from their own waterfalls and are equipped with all the conveniences that electric power affords. The power is therefore very cheap.

The wages of the workers average $1 a day for unskilled labor and increase on a sliding scale for skilled labor. A working day of eight hours is almost universal in Sweden.

In 1911 there were 69 factories of paper and cardboard and 175 other factories engaged in producing articles made of paper. The total number of laborers employed in all these factories was 12,482.

The paper industry of Sweden, generally speaking, is an old one and goes back to the sixteenth century. It is only during the past 30 years, however, that it has become an industry of the first importance in this country. Swedish paper and pulp now finds its way to the remotest markets of the world.

With the development of the industry there has been a great tendency to specialize along the lines of producing news paper and packing paper. The large factories are located at Holmen, in Norrkoping, Lilla Edet, Domnarfvet, Stromsnas, Frovifors, and Orebro.

The following table will best show the development of this industry since 1866:

Years.	Factories.	Laborers.	Value of output.	Years.	Factories.	Laborers.	Value of output.
1866-1870	63	1,861	$1,073,340	1896-1900	59	5,209	$4,899,040
1871-1875	53	2,329	1,720,292	1901-1905	67	6,931	8,125,224
1876-1880	50	2,442	1,934,156	1906-1910	69	7,829	12,506,488
1881-1885	41	2,917	2,116,932	1910	70	8,100	14,441,448
1886-1890	37	3,078	2,363,492	1911	69	8,216	15,294,492
1891-1895	54	4,579	3,238,512				

Exports of paper and paper boards from Sweden in 1912 and the principal countries of destination are given in the following table:

Articles and countries.	Pounds.
Glazed boards:	
Germany	247,540
United Kingdom	2,071,755
Brazil	249,700
Argentina	1,123,824
Australia	100,100
Other countries	167,563
Leather boards:	
Denmark	81,022
Germany	242,050
United Kingdom	468,380
Brazil	102,500
Argentina	233,750
Other countries	90,358
Leather boards (white or colored in the pulp):	
Denmark	2,015,487
Germany	3,161,890
Netherlands	377,707
Belgium	1,016,400
United Kingdom	26,092,000
British South Africa	296,120
China	885,500
Japan	1,168,350
Brazil	203,060
Argentina	1,008,234
Australia	2,053,206
Other countries	321,963
Roofing boards: Various countries	132,660
Carpet paper: Various countries	27,720
Building boards:	
Norway	281,930
Other countries	186,730
Newspaper:	
Norway	1,640,100
Denmark	310,452
Germany	13,926,000
Netherlands	1,756,325
Belgium	723,800
United Kingdom	67,576,800
France	3,140,280
Turkey	1,982,200
Greece	151,800
Egypt	2,244,000
Morocco	224,400
British South Africa	493,900
Asiatic Turkey	145,354
British East India	99,460
China	5,651,140
Newspaper—Continued.	
Japan	922,300
United States	614,300
Central America	256,200
Brazil	9,319,000
Uruguay	1,411,500
Argentina	6,320,000
Chile	2,767,600
Australia	15,203,000
Other countries	1,007,600
White writing paper (with watermark) and envelopes in boxes: Various countries	1,590
Blotting paper (with watermark): Various countries	26,492
White writing and book paper (watermark):	
Norway	27,500
Other countries	33,000
Book printing paper (without watermark):	
Norway	439,120
Denmark	91,850
Germany	782,200
Belgium	93,115
United Kingdom	1,738,000
Turkey	105,820
Japan	133,542
Australia	493,230
Small hands (coarse):	
Germany	2,233,000
Netherlands	242,275
Belgium	121,190
United Kingdom	7,592,640
France	332,750
Canary Islands	150,964
Greece	92,840
China	113,923
Japan	243,100
United States	133,950
Australia	180,120
Other countries	315,118
Small hands (fine):	
Germany	823,140
United Kingdom	1,050,370
United States	262,350
Other countries	57,600
Blotting and filter paper: Various countries	8,919

Imports of paper and paper boards into Sweden in 1912 and the principal countries of origin are given in the following table:

Articles and countries.	Pounds.
Glazed boards:	
Germany	85,430
Switzerland	65,452
Other countries	3,430
Leather boards: Various countries	90,315
Carpet paper:	
Germany	662,635
Netherlands	143,000
Other countries	161,700
Roofing boards:	
Germany	1,272,150
Other countries	78,418
Building boards:	
Netherlands	398,220
Belgium	168,850
Other countries	143,000
Paper, yellow straw: Various countries	121,000
White writing paper (with watermark) and envelopes in boxes:	
Denmark	9,546
Germany	106,700
Other countries	5,280
Blotting paper (with watermark): Various countries	22,550
White writing and book paper:	
Germany	91,740
United Kingdom	28,880
Other countries	59,400
Book-printing paper (without watermark):	
Germany	178,200
United Kingdom	74,580
Other countries	59,000
Smallhands (coarse): Various countries	100,430
Smallhands (fine):	
Germany	148,742
Netherlands	36,135
Other countries	44,304
Blotting and filter paper:	
United Kingdom	73,480
United States	39,600
Other countries	53,680

SWEDISH PAPER MANUFACTURERS' AGREEMENT OR TRUST.

At the final settlement for the year the buyer is allowed a bonus on all the "convention" paper invoiced at all the factories during the calendar year according to prices then in force. The amount of the bonus will be seen from the following:

By a purchase of writing, post, and book paper, all kinds, also not only "convention" paper, of not less than 10,000 crowns ($2,680) worth, 2 per cent; 17,500 crowns ($4,690) worth, 3.5 per cent; 25,000 crowns ($6,700) worth, 5 per cent; 50,000 crowns ($13,400) worth, 6 per cent.

By a purchase of different kinds of paper (in this, however, must not be counted common news paper, cartridge, and wrapping paper paper for the manufacture of matches, so-called board paper, and wall paper) of not less than 15,000 crowns ($4,020) worth, 2 per cent; 25,000 crowns ($6,700) worth, 3½ per cent; 50,000 crowns ($13,400) worth, 5 per cent; 100,000 crowns ($26,800) worth, 6 per cent.

As "convention" paper the following will be counted:

Writing and post paper: Free from wood and rags, glazed, 50 öre ($0.134); unglazed, 48 öre ($0.128); free from wood and rags, striped, glazed, 52 öre ($0.139); unglazed, 50 öre ($0.134). With 11 to 40 per cent mechanical wood, glazed, 44 öre ($0.118); unglazed, 42 öre ($0.112); with 11 to 40 per cent mechanical wood, striped, glazed, 46 öre ($0.123); unglazed, 44 öre ($0.118).

Manila: Free from wood and rags, glazed, 50 öre ($0.134).

Printing paper: Free from wood and rags, glazed, 42 öre ($0.112); unglazed, 40 öre ($0.107); glazed, 41 öre ($0.11). With 11 to 40 per cent mechanical wood, unglazed, striped, or glazed, 39 öre ($0.105); unglazed, 37 öre ($0.10); with 40 to 60 per cent mechanical wood, unglazed, striped, or glazed, 35 öre ($0.094); unglazed, 33 öre ($0.088); all with a weight of at least 60 grams (2.116 ounces) per square meter (10.764 square feet). For weights less than 60 grams, 10 per cent increase. For cutting, 2 öre ($0.00536) net per kilo (2.2 pounds) will be charged.

Oliphant, 35 öre ($0.094), with a weight of at least 50 grams (1.768 ounces) per square meter. For weights under 50 grams an increase of 2 öre ($0.005) per kilo will be made.

Ale etiquette, at least 20 per cent mechanical wood, 35 öre ($0.094).

Art printing paper, with mechanical wood, coated only on one side: Weight in grams not less than 90 (3.174 ounces), 55 öre ($0.147); between 75 and 90, 61 öre ($0.163); less than 75 (2.645 ounces), 66 öre ($0.177). Coated on both sides: Weight in grams not less than 100 (3.527 ounces), 60 öre ($0.161); between 85 and 100, 66 öre ($0.177); less than 85 (2.998 ounces), 72 öre ($0.193). Free from wood, coated only on one side: Weight in grams not less than 90 (3.174 ounces), 63 öre ($0.169); between 75 and 90, 69 öre ($0.185); less than 75 (2.645 ounces), 76 öre ($0.204). Coated on both sides: Weight in grams not less than 100 (3.527 ounces), 68 öre ($0.182); between 85 and 100, 75 öre ($0.201); less than 85 (2.998 ounces), 82 öre ($0.22).

Illustration, coated only on one side: Weight in grams not less than 90 (3.174 ounces), 70 öre ($0.187); between 75 and 90, 77 öre ($0.206); less than 75 (2.645 ounces), 84 öre ($0.225). Coated on both sides: Weight in grams not less than 100 (3.527 ounces), 73 öre ($0.196); between 85 and 100, 80 öre ($0.214); less than 85 (2.998 ounces), 88 öre ($0.236).

All these prices are in force by orders of not less than 1,000 kilos (2,204.6 pounds) and in the same size and weight.

In orders for immediate delivery of not less than 5,000 kilos (11,023 pounds) writing and post paper, free from wood, the above prices will be lowered as follows: For glazed paper, 48 öre ($0.129); unglazed paper, 46 öre ($0.123); for striped, glazed paper, 50 öre ($0.134); unglazed paper, 48 öre ($0.129); with the condition that every size and weight will not weigh less than 1,000 kilos (2,204.6 pounds) by a weight of not less than 60 grams (2.116 ounces) per square meter (10.764 square feet).

Since the new Swedish customs tariff came into force Swedish paper is being used in a much larger degree. The price list referred to above, and which has been issued by the Swedish paper trust, clearly shows to what extent the market is dominated by local manufacturers. The demand for finer qualities of paper is greatly on the increase in this country, and the Swedish paper factories can not supply this demand, at least for the present.

GOTEBORG.

From Consul Emil Sauer.

Factories in this country are, as a rule, averse to giving out figures of cost of labor and cost of raw material, as this in a measure divulges trade secrets, and no such statistics are published by the Government in any form. It may be said in general, however, that wages are high in this country as compared with those in other countries of Europe, and that because of the high wages the most modern machinery has been introduced on an extensive scale. The largest factories with the best equipment are those more recently erected in the northern part of Sweden. For example, in the paper industry of this consular district, which may be said to include all of the southern part of Sweden, the average number of employees per mill in 1911 was $113\frac{5}{9}$, whereas for the rest of Sweden it was 129 employees per mill. The output per mill in this consular district was $201,142, whereas for the rest of Sweden it was $260,123 per mill. The output per employee in this consular district was $1,771, whereas for the rest of Sweden it was $2,010.

For the pulp industry the comparison is even more striking. The average number of employees per mill was $57\frac{51}{82}$ for the consular district and 102 for the rest of Sweden; the output per mill was $105,511 for the consular district and $219,995 for the rest of Sweden; the output per employee was $1,831 for the consular district and $2,158 for the rest of Sweden.

The statistics of average output per employee measure in a way the efficiency of labor; but the analysis can not be carried any further on account of the lack of statistics of wages. An analysis of the statistics given to this consulate through the courtesy of one of the largest paper mills in the southern part of Sweden shows that the average output per employee was 19,216 kilos of paper valued at $1,314. This mill manufactures its own pulp for the paper department. The average amount paid in wages and salaries per employee in both branches, including the office force, was $368 for the year. Further, for every dollar of value of product there was paid by this factory 27 cents for wages and salaries and 24 cents for raw material.

In 1911, the last year for which complete statistics have been published, 72 per cent of the pulp-mill machinery was bought from Germany, 18 per cent from Norway, 6 per cent from Great Britain, and the balance from France and other countries.

The following table shows the amount of different kinds of paper imported into the whole of Sweden during the years 1907 and 1911, in metric tons (2,204.6 pounds):

Articles.	1907	1911	Articles.	1907	1911
	Tons.	*Tons.*		*Tons.*	*Tons.*
Polishing paper, emery paper, glass, and flint paper	149	178	Writing paper (post paper)	170	180
Cartridge paper, packing paper, and other coarse paper not suitable as writing paper, drawing paper, or printing paper	138	130	Drawing paper	89	67
Gilt, silvered, or coated with any other metal	21	17	Tissue paper	115	117
Paper colored otherwise than in the pulp	172	221	Writing paper (large sheets)	370	424
Glazed paper	91	98	Blotting paper	66	98
Paper combined with cotton or linen tissue	5	18	Wall paper (blank)	5	48
Sensitized photographic paper	58	80	Printing paper	467	226
Crêped paper	61	106	Paper for match boxes	8	....
Wrapping paper:			Other kinds of paper	654	1,041
Glazed on one side	28	19	Sheathing paper	361	377
Glazed on both sides	42	37	Pressboard	38	54
Parchment paper	229	515	Gray or raw roofing "filt"	2,007	2,812
			Asphalt board and tar board	691	516
			Asphalt "filt"	39	36
			Leatherboard	32	4
			Other kinds of paper boards	95	61
			Total	6,201	7,480

SWITZERLAND.

BASEL.

From Consul Philip Holland.

Swiss paper factories supply most of the medium and coarser grades of paper, such as commercial writing, book, wrapping, and news papers. Germany chiefly supplies the finer grades of paper. The best qualities of typewriter paper come from England and the United States. The fine grades of social note paper come from Germany, England, and Italy.

Very little wood is available in Switzerland for pulp. The white pine and aspen in Germany are the sources of supply for the Basel paper mills. Little raw wood is brought into the district. Chiefly the cut chips and fibers in the form of cellulose are imported for manufacturing paper. The only raw materials known to be imported from the United States are the aspen and the magnolia cellulose, which sell in Basel at $3 to $3.50 per 100 pounds. Some paper is manufactured from old rags, but very little and only for the high-class papers. All the rags used are supplied by Basel and the surrounding district.

There is a Swiss paper manufacturers' organization which regulates the hours and wages of laborers. All paper factories within the Basel district are operated day and night, except Sundays, with 12-hour shifts. The day and night crews alternate by weeks.

Following are the rates of wages for 12 hours: Engineers, $1 to $1.20; assistant engineers, $0.70 to $0.80; firemen, $1; machinists, $0.80 to $0.90; assistant machinists, $0.60 to $0.70; ordinary laborers, $0.66 to $0.70 (10 hours); girls, $0.50 to $0.60 (10 hours) paper and rag pickers, usually older women, $0.40 to $0.60. The factories furnish living apartments free to their employees and keep the employees insured against sickness and accidents.

It is not practicable to give statistics of imports and exports, as the Basel district is not identified with any Swiss federal administrative division.

Prices usually quoted are 30 days 2 per cent, 60 or 90 days net.

POSSIBLE MARKETS.

American manufacturers wishing to enter the Swiss market must study the demands of the market, especially the kinds of paper wanted, and suit their products to the Swiss market rather than try to induce the Swiss importers to suit their needs to the American products. The German manufacturers send their agents and representatives to Switzerland to study the needs and demands of the Swiss and then manufacture the goods exactly as wanted.

Up to the present time American-made paper has made but little headway in the Swiss market. Of course the proximity of Germany is greatly to that country's advantage. Whether the American manufacturers can pay freight to Basel and compete with Germany in all grades of paper, as well as with Swiss manufacturers, is as yet unsolved. The best opportunity, however, for American paper in Switzerland, the consul believes after consulting the trade, is in high-grade papers, such as commercial, typewriter, letter, and social note paper.

GENEVA.

From Consul Francis B. Keene.

Most paper used in this consular district is made either in Switzerland or in France, a little being imported from England.

It is impossible to give any estimate as to the quantity of paper used in this section of Switzerland; the whole country is too small to have statistics for each Canton as to consumption and needs of certain articles. National statistics give near enough useful indication to our home manufacturers desiring to do business with Switzerland.

As a rule, paper of superior quality is rarely used in this region, fair medium and cheap grades being generally resorted to by all business houses and individuals. Paper made in America is little or not at all used or known here. A small quantity of superior quality was imported for typewriting purposes, but its consumption was very limited.

Catalogues and price lists of Swiss manufacturers quote paper as follows:

	Centimeters.	Inches.
Crosse	36 by 45	14.174 by 17.716
Lion	38 by 48	14.960 by 18.897
Chancellerie	38 by 50	14.960 by 19.685
Petit median	41 by 53	18.288 by 20.866
Cloche	41 by 60	18.288 by 23.622
Grand median	44 by 58	17.328 by 22.834
Petit royal	47 by 62	18.503 by 24.409
Grand raisin	50 by 65	19.685 by 25.590
Grand royal	51 by 68	20.078 by 26.771
Jesus	55 by 72	21.653 by 28.346
Grand soleil	57 by 80	22.440 by 31.496
Imperial	60 by 84	23.622 by 33.070
Colombier	62 by 90	24.409 by 35.433
Grand aigle	72 by 106	28.346 by 41.732

Prices are generally given for goods sent to any Swiss railroad station, with the exception of consignments of a value less than 20 francs ($3.86), but payments must be made at the manufacturer's place 30 days after date of invoice, less 2 per cent discount or 90 days net. For all kinds of paper the ream of 500 sheets is the unit.

Writing paper conforms to the French and German sizes, the French being 44½ by 56 centimeters (17.518 by 22.047 inches) and the German 46 by 59 centimeters (18.11 by 23.228 inches). In this part of Switzerland, where French is the language of the natives, the French influence is very apparent.

Commercial paper is almost always white—sometimes lightly tinted with yellow, blue, gray, green, brown, or pink. It is often prepared and ruled in "coquille," 27½ by 42½ centimeters (10.825 by 16.731 inches) and "poulet," 21 by 27 centimeters (8.267 by 10.629 inches). Typewriter paper is described as pure linen, 46 by 59 centimeters (18.11 by 23.228 inches), varying in weight from 6 to 8 kilos (13.2277 to 17.6370 pounds) per ream.

Blotting paper is 44 by 58 centimeters (17.328 by 22.834 inches), 12½ kilos (27.557 pounds) a ream, to 45 by 72 centimeters (17.716 by 28.346 inches), 40 kilos (88.184 pounds) per ream—white, pink, yellowish, blue, green, and brownish. The 44 by 58 size of cheap quality is the most used.

White tissue paper, "median," 46 by 60 centimeters (18.11 by 23.622 inches), weighing 3½ kilos (7.716 pounds) per ream, and "elephant," 70 by 100 centimeters (27.559 by 39.37 inches), 7¼ kilos (15.983 pounds) per ream, are obtainable, the cheap, unglazed, being most used. Very little tissue paper tinted either blue of pink is sold.

Wrapping paper is blue, bank-yellow, white, or brown, varying in sizes between "crosse" and "elephant," weighing from 6 to 60 kilos (13.227 to 132.276 pounds) per ream. Blue and bank-yellow of a fair quality are preferred.

Most of the writing paper used here is supplied by the mills located in the German-speaking part of Switzerland; this district possesses only paper mills where wrapping paper and the like is made. "Coquille," 27½ by 42½ centimeters (10.825 by 16.731 inches), is the usual standard size for writing paper; "poulet," 21 by 27 centimeters (8.267 by 10.629 inches), comes next.

There are important rag dealers in the country, but they are not located in this region. It is generally acknowledged that raw material for paper manufacture is ample for the manufacturing.

ST. GALL.

From Consul D. I. Murphy.

The paper supply in the St. Gall consular district, comprising the Swiss Cantons of St. Gall, Appenzell, Thurgau, and Graubuenden, comes largely from domestic mills. There are two paper factories within the limits of the district—one at Landquart, Canton of Graubuenden and the other at Bischofszell, Canton of Thurgau—wood fiber being exclusively used for the manufacture of newspaper in rolls.

The great demand appears to be for white, rough paper, weighing from 1.76 to 1.94 pounds per square meter (10.764 square feet). The rolls average about 330 pounds in weight and sell at wholesale for a trifle over 8 cents per 100 kilos (220.46 pounds). The fiber is from Swiss pine, costing from $2.32 to $3.86 per 220.46 pounds. At the same factories cellulose is utilized in making strong, durable, yet light-weight wrapping paper of good quality, the supply coming from Switzerland, Germany, and Austria-Hungary, costing from $2.30 to $5.97 per 220.46 pounds. Waste paper, costing from $0.50 to $1.93 per 220.46 pounds, enters largely into the manufacture of cheap packing paper, while rags, jute, and waste, costing from $0.58 to $3.28 for every 220.46 pounds, are used in the making of a medium quality of packing paper.

Special inquiries instituted to ascertain the probabilities of a market here for American products, lead me to believe that there is but a limited field in this district and that only for the finer qualities of writing paper and carbon paper.

It has been found quite impossible to obtain any statistics of imports or exports so far as any particular Swiss district is concerned. The following table shows Switzerland's total value of imports and exports of paper and cardboard, together with the countries to which exported:

Years.	Value.	Years.	Value.
IMPORTS.		EXPORTS.	
1911	$2,901,079	1911	$578,147
1912	3,196,771	1912	657,879

The exports are divided into the following groups: Group A, unprinted paper and cardboard of all kinds; Group B, printed paper and cardboard of all kinds; Group C, oil, wax, parchment, and chemically prepared paper.

Countries.	A.	B.	C.
Germany	$43,592	$147,835	$6,452
Italy	30,357	53,571	13,083
France	20,790	80,882	3,307
Austria-Hungary	11,028	81,149	640
United States	7,361	11,145	....
All other countries	25,682	115,454	5,551
Total, 1912	138,810	490,036	29,033
Total, 1911	115,118	444,126	15,908

Most of the Swiss paper mills are corporations, the director (a technical expert) receiving a compensation varying from between $4,800 to $7, 720 per annum, and the business manager from $3,860 to $5,790 per annum.

It costs from $193,000 to $289,000 to erect a paper plant—with one machine—in this section of Switzerland.

Terms in the paper trade are uniformly 30 days with 2 per cent discount, or 3 months net, the manufacturers having an agreement to that effect.

It is proper to add that the paper import into Switzerland appears to be on the increase, the country being a large consumer. Swiss dealers, as a class, are prompt payers, the German, French, and English manufacturers quoting them lower prices than for their own domestic trade. The Swiss paper mills, however, have the very great advantage of short freights and no duty.

ZURICH.

From Consul General David F. Wilber.

A large percentage of the coarser and the medium grades of the paper of all kinds that is consumed in Switzerland is of domestic origin, there being some 20 paper factories in various parts of the country, which are affiliated in the Association of Swiss Paper Manufacturers (Verband Schweizerischer Papier- und Papierstoff-Fabrikanten) in Zurich.

Paper of all grades and classes is also imported in large quantities from Germany; plain unfinished cardboards and pasteboard are imported principally from Austria-Hungary; some wrapping paper comes from Sweden; and certain finer varieties of note, correspondence, and typewriter and carbon papers come from Italy, England, and even from the United States. On the whole, however, more than two-thirds of all the paper imported into Switzerland comes from Germany and a large part of the remainder comes from Austria, so that the importation from the other countries named is more in the nature of occasional or chance importation of special lines that are not so extensively produced in Germany or Austria.

Besides carbon paper and other papers of the stationery lines, which have for some time been imported from the United States, the only varieties for which a demand here has been reported since the outbreak of the war are for certain papers for technical and industrial uses, such as parchment paper, which on account of export embargoes or for other reasons can not now be secured in sufficient quantities in Germany.

With the exception of the number of the Swiss paper mills given above, no statistics are available of the extent of this industry nor the volume or value of the annual production. It is, however, conceded that a very considerable part of the different kinds of paper that is consumed in Switzerland is also of domestic production, but, on the other hand, Swiss paper mills manufacture practically only for the home market, and the exports are therefore comparatively small.

The raw products of the Swiss paper industry are also largely of domestic origin, especially rags, old ropes, and waste paper, a considerable surplus of which is exported to Germany. In the case of mechanical wood and rag pulps there is also a comparatively much greater surplus of the exports over the imports, practically all of the exports in this category going to France. Only in chemical wood pulp, both unbleached and bleached, is the volume of the importation greater, in fact more than double, that of the exportation, the principal countries of origin being Germany, Austria, and Sweden. There is as yet no noticeable effect of the war with reference to the raw products of the Swiss paper industries, except that certain chemicals, such as sulphate of aluminum, or paper alum, which have heretofore been procured in Germany, are now being sought in other countries.

The following tables give the volume, in metric tons of 2,204.6 pounds each, as well as the value of the Swiss imports and exports for the year 1913 of the raw products for the manufacture of paper and of the principal unprinted paper cardboard and pasteboard varieties as published in the official commercial statistics:

Articles and countries.	Imports.		Exports.	
	Metric tons.	Value.	Metric tons.	Value.
RAW PRODUCTS.				
Rags, etc.:				
Germany	4,796	$222,146	5,566	$263,006
France	1,444	69,673	2,663	119,201
Italy	1	43	1,013	42,907
Great Britain	71	4,123	557	56,698
Other countries	402	20,012	499	30,946
Total	6,714	315,997	10,298	512,758
Mechanical wood and rag pulps:				
France	....	....	1,702	237,559
Germany	554	16,047	24	3,794
Austria	823	23,823	....	....
Other countries	213	6,163	92	9,222
Total	1,590	46,033	1,818	250,575
Chemical wood pulp, unbleached:				
Germany	2,159	99,996	23	1,094
Sweden	1,739	80,537	....	....
Russia	120	5,514	....	....
Italy	....	....	765	36,651
France	....	....	1,944	89,059
Other countries	266	12,407	1	372
Total	4,284	198,454	2,733	127,176
Chemical wood pulp, bleached:				
Germany	4,380	236,684	80	4,248
Austria	1,572	84,967	1	288
France	....	....	1,249	71,799
Italy	....	....	767	44,479
United States	101	5,854	1	295
Other countries	139	7,501	....	....
Total	6,192	335,006	2,098	121,109
Total raw products	18,780	895,490	16,947	1,011,618
PAPER, CARDBOARD, AND PASTEBOARD.				
Plain, without being subsequently advanced in condition.				
Gray cardboard and pasteboard, of wood, straw, leather, etc.:				
Germany	520	20,060	230	9,635
Austria	1,462	62,081	47	2,030
Italy	6	242	53	3,141
Other countries	49	2,503	15	937
Total	2,037	84,886	345	15,743
Wrapping paper, both sides unfinished, weighing 100–400 grams (3½–14 ounces) per square meter (1.196 square yards):				
Germany	218	10,934	4	479
Other countries	5	272	23	2,400
Total	223	11,206	27	2,879
Wrapping paper, all other, also oiled:				
Germany	974	62,010	22	2,662
Sweden	312	24,048	....	....
Italy	190	15,801	42	4,576
Holland	102	8,498	....	....
France	38	3,162	73	7,574
Other countries	148	13,720	53	6,314
Total	1,764	127,239	190	21,126

Articles and countries.	Imports.		Exports.	
	Metric tons.	Value.	Metric tons.	Value.
PAPER, CARDBOARD, AND PASTEBOARD—Continued.				
Plain, without being subsequently advanced in condition.—Continued.				
Tissue paper, weighing 25 grams (0.88 ounce) and less per square meter:				
Germany	533	$92,651	1	$195
Austria	53	10,152	1	350
Sweden	78	14,996	....	....
Other countries	120	23,326	3	900
Total	784	141,125	5	1,445
Newspaper paper, weighing 45-55 grams (1.59-1.94 ounces) per square meter:				
Germany	316	21,373	....	....
Other countries	16	1,074	11	947
Total	332	22,447	11	947
Other one-colored printing, writing, and drawing paper:				
Germany	3,428	463,109	56	12,389
Austria	439	59,323	24	7,339
England	236	38,306	8	3,827
France	199	26,817	29	6,407
Other countries	66	9,977	116	26,683
Total	4,368	597,532	233	56,645
Cardboards weighing 200-300 grams (7-10½ ounces) per square meter:				
Germany	324	50,087	7	1,738
Austria	27	5,759	2	267
Other countries	27	2,577	16	3,634
Total	378	58,423	25	5,639
Cardboard weighing over 300 grams (10½ ounces) per square meter:				
Germany	228	37,338	59	16,954
Austria	25	4,101	2	426
Other countries	9	1,592	52	13,452
Total	262	43,031	113	30,832
Plain paper, subsequently advanced in condition.				
Paper, cardboard, and pasteboard, ruled:				
Germany	75	14,456	3	1,162
Austria	27	5,288	2	575
Other countries	6	1,245	12	7,012
Total	108	20,989	17	8,749
Paper and carboard, without pattern, painted on one or both sides or covered with painted paper; also pleated, perforated, and gummed papers, but not including sensitized papers:				
Germany	1,180	182,161	2	1,223
England	76	12,730	....	....
France	10	1,513	9	3,382
Other countries	32	4,742	10	5,268
Total	1,298	201,146	21	9,873
Paper and cardboard with impressed or embossed designs:				
Germany	151	31,951	1	176
Other countries	25	5,445	1	722
Total	176	37,396	2	898
Parchment and pergamin paper:				
Germany	956	129,196	....	....
Belgium	72	9,673	....	....
Other countries	96	13,213	9	1,524
Total	1,124	152,082	9	1,524

Articles and countries.	Imports.		Exports.	
	Metric tons.	Value.	Metric tons.	Value.
PAPER, CARDBOARD, AND PASTEBOARD—Continued.				
Plain paper, subsequently advanced in condition—Continued.				
Chemically prepared and sensitized papers:				
Germany	119	$88,150	1	$1,150
Belgium	17	24,106		
England	20	13,140		
Other countries	18	18,980	24	16,022
Total	174	144,376	25	17,172
Papers and cardboards cut in widths of less than 25 centimeters (9.83 inches); also in rolls:				
Germany	383	70,132	3	796
France	37	6,894	9	2,975
England	24	4,418		
Other countries	35	6,564	17	5,079
Total	479	88,008	29	8,850
Other unprinted papers, cardboards, and pasteboards	850	145,312	74	17,416
Grand total	14,357	1,875,198	1,126	199,738
SPECIAL PRODUCTS OF PAPER.				
Wall paper:				
Germany	759	175,715	2	237
France	128	29,645	1	513
England	31	7,133		
Other countries	22	5,315		576
Total	940	217,808	3	1,326
Packing and folding boxes, tubes, not covered, also printed; cut, slitted, or bent cardboard:				
Germany	123	21,382	2	484
France	17	2,918	3	929
Austria-Hungary	2	295	2	366
Other countries	2	539	10	1,725
Total	144	25,134	17	3,504
Paper bags, paper cornets, and containers:				
Germany	99	20,975	1	273
France	12	2,527	35	8,286
Italy	3	552	1	147
Other countries	3	872		336
Total	117	24,926	37	9,042
Envelopes, packed loosely:				
Germany	53	12,391	13	4,735
France	5	1,204	2	690
Belgium	11	2,594	2	703
England	6	1,459	4	1,332
Other countries	7	1,459	2	814
Total	82	19,107	23	8,274
Envelopes in boxes, etc., with or without letter paper:				
Germany	144	55,816	1	369
Austria-Hungary	14	5,442		
France	29	11,271	2	952
England	8	3,204		151
Other countries	6	1,930	1	536
Total	201	77,663	4	2,008
Cards and paper sheets for Jacquard weaving machines:				
Germany	8	1,312	9	4,318
France	21	3,181	1	275
Other countries			1	497
Total	29	4,493	11	5,090
Bobbins and spools of paper and cardboard for weaving and spinning factories:				
Germany	9	2,131	1	121
France	7	1,644	1	436
Other countries	2	347	2	775
Total	18	4,122	4	1,332

To supply the requirements of the Swiss exporting lines there have been developed very important domestic industries for the manufacture of cardboard and pasteboard and the manufacture of articles of cardboard and pasteboard. The principal articles produced are cardboard boxes, spools, bobbins, boards, etc., required for the embroidery, silk, silk ribbon, knitted goods, and other textile industries; also cardboard boxes for watches and clocks, chocolate and shoe industries; cardboard designs for Jacquard weaving machines; and other related articles of cardboard and pasteboard. There are in all some 25 Swiss cardboard and pasteboard manufacturers producing raw materials for some 50 manufacturers of cardboard products. The latter also have a Swiss manufacturers' association, being the Verband Schweizerischer Cartonnagen fabrikanten, in Thun (Canton Berne), and the present situation in the branch is understood to be generally good.

Cardboard boxes and products here are generally made according to specifications given often on short notice, and American manufacturers could, therefore, hardly expect to compete in this line, but they might well expect, especially under the present war conditions, to sell cardboard to the Swiss manufacturers of cardboard products.

The secretary of the Swiss Associated Dealers in Wall Paper (Verein Schweizerischer Tapetenhändler), in Zurich, reports that there are no Swiss manufacturers of wall paper and that the principal source for the importation is Germany, the supply from France and England having very greatly decreased in recent years. The German standard roll of 0.50 by 8 meters (1.64 by 26¼ feet) generally obtains, and bright colors in gobelins, roses, and other flower patterns are preferred. Great stress is placed upon obtaining colors and patterns that do not fade. The prices range from 1 to 6 francs ($0.193 to $1.158) per roll. The usual terms are three months' credit, followed by a three months' sight draft or 5 per cent discount if paid within the month following the date of delivery. Some American wall-paper manufacturers are represented among the larger dealers, but the sales are said to be small, owing to the fact that the prices are comparatively high, deliveries are very slow, and the manufacturing processes are also technically imperfect.

CONFIDENTIAL SUPPLEMENT.

On account of export embargoes in the surrounding countries and the resulting difficulties in securing the various raw products of the Swiss paper-manufacturing industry, as well as the present high prices for the same, the Swiss Association of Paper and Paper Pulp Manufacturers in Zurich has informed the Swiss book printers and publishers that the present prices of paper will be raised and the secretary of the Swiss Book Printers and Publishers Association has therefore also given notice that the prices for books, etc., will be proportionately increased. There is even doubt expressed as to whether the Swiss paper manufacturers can, under the present conditions, continue to manufacture paper at all.

American manufacturers of book paper could quite probably, therefore, make some sales here now and thus gain a footing and be in a fair position to establish more permanent connections for the future.

TURKEY.

From Vice Consul General Oscar S. Heizer, Constantinople.

The market for paper in Turkey varies greatly, according to the locality. The majority of printing shops are gathered within a limited number of well-defined areas, and the consumption of printing papers outside these areas is a negligible quantity. The peculiar trade conditions give rise to acute demands for certain classes of paper in certain districts. For example, oiled papers for packing dried fruits in Asia Minor, tissue paper for the orange industry of Palestine, and special tissue paper for the manufacture of cigarette papers in European Turkey are demanded within comparatively limited districts. In general, there are few specialists in paper among tradesmen, and the users of paper are generally unable to appreciate quality in paper or to appreciate reasons for having papers of good quality. As a result, there is no such thing as standard quality and two papers having almost the same physical characteristics to the eye of the untrained observer would compete on a price basis. The kinds and qualities of paper are numberless and the introduction of new ones would meet with few obstacles on the ground of newness.

Amid all this profusion of papers there is no such thing as a local product; it is all imported. It is imported from all over the world. I dare say that there is no country which exports paper that does not export some to Turkey. The United States also has its share in this, but as yet its share is a rather small one. The prices are low. The great bulk of paper varies in price from 23 to 41 francs per 100 kilos ($0.02024 to $0.03608 per pound), although there are papers which sell as high as 250 francs per 100 kilos ($0.219 per pound). These prices will be explained in greater detail below. There is absolutely no hindrance to Americans entering this field. It is a field well worth cultivation. There are few mills that have systematically sought trade here. The country has, unfortunately, been used as a dumping ground for surplus stocks. When the consumption in their chief markets has fallen below normal, the paper manufacturers of Europe have only to quote their respective products at a price slightly lower than the nearest similar paper then on the Turkish market in order to find an outlet for their overproduction. In saying this, I do not wish to imply that it is a universal truth. It is only a general one. There are many papers in certain lines which have succeeded in establishing definite reputations; there are many manufacturers who have seriously gone after the trade through capable representatives and who have built up a following.

MARKET SUGGESTIONS.

There are but two serious obstacles to the introduction of American paper products to this market and both of these obstacles are really nonexistent for houses that wish to seriously seek trade here. They are: First, an unwillingness on the part of the American manufacturer to quote prices and payment in francs c. i. f. port of destination; and second, the failure of the American manufacturer to be content with a small initial order. The introduction of new goods is a slow process, and they must be disposed of in small lots. Moreover, there is no individual importer that would risk tying up a large sum of money in a paper stock that may be underbid before more than a quarter of it could be sold.

As indicated above, and as will be explained below, the cheaper grades of paper are most in demand in every line. The American manufacturer producing, as he does, chiefly for the home market, naturally maintains a rather high quality standard. His products could be dribbled out in small lots here and an experiment would very probably prove profitable in the end.

At present there would seem to be three types of paper which Americans could successfully introduce. They are typewriter, news, and coarse wrapping.

The port of Constantinople receives a full half of the paper imports of the Ottoman Empire. Most of this paper remains in the Constantinople district, although Constantinople is the distributing center for a very large part of Asia Minor and also for much of the Balkan Peninsula.

With the exception of the specialties called for by particular industries, the paper on this market is fairly typical of all the paper that is imported in the Empire. There is an endless variety of sizes and quality and color in each type. In analyzing these it is almost impossible to do more than write generalities about each type. However, the samples which accompany this report are fairly representative of the prevalent grades, and they should afford some information to the experts of interested American paper mills.

The terms upon which papers are sold vary in some instances according to the class of paper and the country of origin. In the following analysis of the local market I shall note exceptional terms applying to a very few papers.

WRITING PAPERS.

Social correspondence paper and envelopes.—This may be divided into two classes. In the first may be grouped all the papers used by a colony of foreigners and Europeanized natives, whose numbers are estimated at about 25,000 persons. These use stationery mostly of medium grade, imported in boxes from Austria-Hungary, France, Belgium, and England, the bulk of it coming from Austria-Hungary. They are not particularly inclined to any one quality or size or style of packing. Almost any American paper would be acceptable in limited quantities. Envelopes, however, should be lined. In the second class we may put the paper commonly used by the mass of the native population. These are, for the most part, illiterate and, from the American viewpoint, use an amount of paper utterly disproportionate to their numbers. It comes largely from Austria-Hungary and is of very poor quality. This paper is put up in many styles of package, usually according to the instructions of the purchaser. It is used also in the manufacture of various styles of notebooks and blank books. It usually comes ruled, though some is sold blank, the purchaser ordering ruling specially. These papers vary in price from 35 to 40 francs per 100 kilos ($0.03065 to $0.035 per pound), and an additional charge of from 3 to 6 francs per 100 kilos ($0.00263 to $0.00525 per pound) is made for ruling. The weight varies from 50 to 100 grams per square meter (1.76 to 3.53

ounces per 1.196 square yards), and the most popular size is 41 by 63 centimeters (16.14 by 24.8 inches).

Business correspondence paper.—Almost all qualities are used, and for papers already cut there is no standard size, the American 8½ by 11 inch size being as acceptable as any other. When sold flat the usual sizes are 44 by 56 centimeters (18.11 by 22.83 inches), 46 by 58 centimeters (19.685 by 25.59 inches), 50 by 65 centimeters (19.685 by 27.56 inches), 50 by 70 centimeters (22.44 by 32.28 inches), and 57 by 82 centimeters (17.32 by 22.105 inches). There is an increasingly large amount of linen paper sold annually, due to the extended use of typewriters. The great majority of business men with large correspondence are foreigners and the grades in use are moderately good. The better grades usually come from England and France, while Austria-Hungary leads the field in other qualities, with Germany also as a competitor. These papers usually come packed in reams of 500 sheets, while billheads, size 23 by 30 centimeters (8.06 by 11.81 inches), come in packages of 200.

The population is accustomed to the standard European size of envelopes, most of which come from Germany. Other countries supplying envelopes are Austria-Hungary and France.

PRINTING PAPERS.

It is estimated that there are some 250 printing shops in Constantinople varying from shops of a single press to the very largest types of modern plant. These consume annually increasing amounts of paper, but most of it, in fact practically all, is of the very cheapest quality. Book papers are usually satin-finish news qualities. There is hardly any consumption of book papers as known in America that would warrant attempts to enter this market at the present moment. Ordinary press papers in this field may be grouped:

News paper.—Estimates of the total consumption of papers in this class vary greatly but some put a total as high as 8,000 tons.

These papers come in rolls of 80 centimeters (31.5 inches), 100 centimeters (39.37 inches), and 135 centimeters (53.15 inches) in width and weighing about 200 kilos. The weight usually varies from 40 to 47 grams (1.411 to 1.658 ounces) per square meter (1.196 square yards). Prices average 25 francs per 100 kilos ($0.0219 per pound), some selling as low as 23.50 francs per 100 kilos ($0.02057 per pound). Estimates made by dealers on the consumption of news paper in rolls vary greatly. The lowest was only 300 tons and the highest 2,000 tons. Scandinavia is the principal source of supply, some of it being purchased in Austria-Hungary, Germany, and Belgium.

Imports of news paper packed flat, in reams of 500 sheets, are estimated at 1,000 tons yearly. Sizes are 95 by 135 centimeters (37.4 by 53.15 inches), 68 by 100 centimeters (27.87 by 39.37 inches), 67 by 97 centimeters (26.38 by 38.19 inches), 64 by 94 centimeters (25.2 by 37.01 inches), 60 by 90 centimeters (23.62 by 35.43 inches), 57 by 82 centimeters (22.44 by 32.28 inches), 51 by 72 centimeters (20.08 by 28.35 inches), and 50 by 75 centimeters (19.685 by 29.53 inches). Similar paper, satin-finish, sells at prices varying around 30 francs per 100 kilos ($0.0263 per pound); estimated annual consumption, 1,000 tons.

Colored news, similar to above papers, is used in weights of 45 to 80 grams per square meter. Prices are about 5 per cent higher than ordinary papers of similar quality.

Other printing papers.—Most all of these are made from a bisulphite pulp and are papers of the type known in Austria-Hungary and Germany as "Holzfrei." Current sizes are 48 by 68 centimeters (18.9 by 27.87 inches), 57 by 82 centimeters (22.44 by 32.28 inches), 68 by 100 centimeters (27.87 by 39.37 inches), 50 by 75 centimeters (19.685 by 29.53 inches), 60 by 90 centimeters (23.62 by 35.43 inches). They are all glazed papers imported from Austria-Hungary, Belgium, Germany, and Norway. The weights run from 50 grams per square meter up, most papers being about 60 grams. The cheaper qualities run in price from 29½ to 32 francs per 100 kilos ($0.02582 to $0.02805 per pound), and the best in current use seldom cost over 40 francs ($0.035 per pound), although there is a certain amount costing as high as 50 francs ($0.0438 per pound). The papers between 40 and 50 francs are used principally by Government departments and in making ledgers of various kinds.

Papers in this class are usually put up in packages of 125 and 250 sheets, the purchaser paying a fixed charge for the packing. It is estimated that over 3,000 tons are imported annually. Austria and Germany are waging a bitter competition in this class of papers, though a Belgian house with mills at Huy leads the field in the sales of the cheaper qualities of this type of paper. This Belgian house insists on and secures absolutely prompt payment on arrival of shipping documents and its terms are net cash.

Cover papers.—There is no distinct trade in this class of goods, as paper-bound publications are usually bound with colored printing paper or colored wrapping paper. Various shades of green are most popular for this purpose.

WRAPPING PAPERS.

Wrapping papers compose no inconsiderable portion of the imports, and certain classes of these papers should be of interest to American mills producing similar grades. These are usually papers of inferior quality. One manufacturer's representative has found it almost impossible to place his wares, despite the fact that they are stronger than other wrapping papers for similar purposes. The reason for his failure is that his product apparently costs twice as much as other papers, while in reality, being only half as heavy, the price is the same.

Straw paper.—This paper is imported from almost all countries of Europe and is made up locally into bags which are very extensively used by butchers, grocers, fruit dealers, and other tradesmen. It varies in weight from 55 to 95 grams per square meter (1.9398 to 3.3506 ounces per 1.196 square yards). Prices run from 18 to 22 francs per 100 kilos ($0.0158 to $0.01925 per pound). The sizes vary according to the size of the bag into which the paper is to be made, but some of the more common dimensions are 32 by 42 centimeters (12.6 by 16.54 inches), 52 by 72 centimeters (20.47 by 28.35 inches), 48 by 58 centimeters (18.9 by 22.85 inches). The estimated annual consumption is about 2,500 tons.

Ordinary wrapping paper.—This is a very cheap grade of paper made from paper remnants. It usually comes in sheets of 48 by 63 centimeters (18.9 by 24.8 inches) and varies in weight from 150 to 250 grams (4.8225 to 8.0375 ounces) per square meter (1.196 square yards). It is used chiefly for packing tobacco, and the annual sales are placed at 1,000 tons. Prices vary from 18 to 21 francs per 100 kilos ($0.0158 to $0.01838 per pound).

Cellulose wrapping paper.—This comes in various and varied colors and is widely employed for a variety of purposes. In 1912 some 2,800 tons were imported, and it is estimated that in normal years about 4,000 tons are sold here. Weights vary from 40 to 150 grams (1.4108 to 5.2905 ounces) per square meter (1.196 square yards), the papers under 100 grams being most in use. The average price is about 36 francs ($0.03155 per pound), different colors commanding different prices. Sizes of the sheets and packing are determined by special conditions, 82 by 114 centimeters (32.28 by 44.88 inches) and 90 by 126 centimeters (35.43 by 49.65 inches) being fairly common. The principal sources of supply are Germany, Sweden, Austria-Hungary, and Belgium.

"*Patent*" *paper.*—This is also widely employed. About 3,000 tons are imported annually from Scandinavia, Germany, and Austria-Hungary. Weights vary from 45 to 250 grams (1.49 to 8.82 ounces) per square meter, those about 80 grams being most used. Stock sizes are 65 by 90 centimeters (25.59 by 35.43 inches) and 90 by 130 centimeters (35.43 by 51.18 inches). Prices are about 22 francs per 100 kilos ($0.01925 per pound).

Besides these there are a variety of other wrapping papers imported in job lots, but they are hardly to be considered as typical of the market, except as indicating the lack of a definite tone in the range of papers used less frequently.

MISCELLANEOUS PAPERS.

Blotting paper.—This is a comparatively new article on the market, and it is making steady progress. Turkish inks are dried with sand, but European inks are now widely used, and therefore blotting papers are gaining in popularity. Blotting papers are imported principally from England, other sources of supply being Austria-Hungary, America, and France. Sizes vary, the most ordinary being 39 by 51 centimeters (15.35 by 20.08 inches), and the weights range from 50 to 80 grams (1.7635 to 2.8216 ounces) per square meter. Prices run from 70 to 125 francs per 100 kilos ($0.0613 to $0.11 per pound.

Carbon paper.—Copying is still largely done with the old-fashioned letterpress, if at all. At present there is a limited sale of carbon paper, but there is a good opportunity to create a demand in connection with the sale of light-weight typewriter papers and American filing systems. The carbon papers now on the market sell at from 5 to 9 francs ($0.965 to $1.737) for 100 sheets foolscap size.

Wall paper.—Most houses are built with simple whitewashed or painted walls. There is a fair consumption of wall paper for use in lining cheap trunks. The homes of many Europeans in Turkey have interior decorations in paper. It is estimated that some $6,000 to $7,000 worth only is imported, and of this about 75 per cent comes from Germany, which supplies all of the cheaper grades. Other countries from which these are imported are Belgium, France, and England. These papers come in rolls 6 and 8 meters (19.68 and 26.25 feet) long by 50 centimeters (19.685 inches) wide. The prices of the cheap grades range from 5 to 25 centimes ($0.00965 to $0.048) per roll. Medium grades go up as high as 75 centimes ($0.14475) per roll. There is practically no sale of really fine wall papers. Credit of three to six months is usually given and a discount of 5 to 10 per cent is allowed for payment within 30 days of arrival of goods.

Cloth-lined papers are infrequent and ordered for special jobs only, and in case of emergency are made up locally.

Cigarette papers.—This class of goods forms one of the most important items in the paper market of Turkey. The great center of the trade in cigarette papers is Constantinople, and its market practically rules that of the entire country. In considering these goods they must be divided into two groups, flat and package; that is, as a supply for an industry and as a supply for the individual smoker.

There is quite an industry in the manufacture of small booklets of cigarette papers. It is estimated that some 850,000 reams of tissue paper to be cut up into cigarette papers is imported into Turkey annually, and of these some 500,000 reams come through the port of Constantinople. Both wove and watermarked laid papers are used. They are packed in bales of 30 reams of 480 sheets each. The only size used is 56.5 by 74 centimeters (22.244 by 29.92 inches). The weight of the ream varies from 3.3 kilos (7.275 pounds) down to 2.6 kilos (5.732 pounds). The best qualities sell as high as 6.25 francs ($1.20) per ream, while the cheaper ones go for as little as 4.25 francs ($0.82). The principal sources of supply are Russia and Italy for cheaper grades and France for the better grades.

The industry referred to in the preceding paragraph produces booklets of 50, 60, 90, 100, 150 sheets for use by smokers. This industry is so extensive that Turkey does no little export trade in this line of goods, principally to neighboring countries, but no small amount goes to England, France, America, Italy, and Austria, where it is extensively consumed by natives of the Levant who have emigrated to those places and who continue to use the peculiar qualities to which they are accustomed. Besides the immense amounts imported in the sheet, there come annually to Constantinople some 110,000 boxes containing 60 to 90 booklets each, of which 100,000 come from Austria-Hungary and the rest from Italy. The best qualities sell at 5.25 francs ($1.013) per box of 60 booklets of 150 sheets each, c. i. f. Constantinople, with 3 per cent discount for cash.

CARDBOARD.

Bristol board comes put up in boxes of 100 sheets. The trade in this line is insignificant. Some little Bristol board is imported in sheets 48 by 64 centimeters (18.9 by 25.2 inches) from Austria and Germany and in sheets of 50 by 65 centimeters (19.685 by 25.59 inches) from France and England. There are four other principal types of cardboard.

Strawboard.—Strawboard is put up in packages of 25 kilos (55.1156 pounds), containing from 10 to 25 boards each. Sizes are 65 by 85 centimeters (25.59 by 33.46 inches) and 70 by 100 centimeters (27.56 by 39.37 inches). Prices range from 14 to 15 francs per 100 kilos ($0.0123 to $0.01318 per pound). The sources of supply are Belgium, Germany, Austria, Italy, and Holland; estimated consumption, 150 tons annually.

Brown cardboard.—Same packing and sizes; extensively used in shoemaking industry. Prices are 18 to 20 francs per 100 kilos ($0.0158 to $0.0175 per pound). Imports come principally from Austria; estimated annual imports, 200 tons.

Gray cardboard.—Same packing and sizes; largely used in bookbinding and allied industries.

White cardboard.—Packages of 25 kilos, containing 15 to 100 boards, same sizes. The estimated annual consumption is 1,000 tons. It is put to a great variety of uses, one of the principal being for the manufacture of cigarette boxes. Supplies come principally from Austria and Finland. The average price is about 18 crowns per 100 kilos ($0.01657 per pound).

As indicated above, the entire paper market of Turkey is supplied from abroad and there is absolutely no paper mill running in Turkey. There is but one mill (located at Beicos, a suburb of Constantinople), and that has been closed and idle for many years. There was some agitation to reopen it recently, but dealers do not believe it can be made to pay. There is, moreover, no available supply of materials, the forests of pulp woods being too far away from any railroad line or navigable river.

There is some slight exportation of paper-making materials and rags. The latest statistics issued by the Turkish Government for exports in the group "paper" are:

Articles.	Year ending Mar. 13.	From all Turkey.		From Constantinople.	
		Pounds.	Value.	Pounds.	Value.
Cigarette papers and tubes	1911	151,366	$41,217	117,407	$37,136
	1912	207,966	68,868	177,371	63,020
Rags and paper pulp	1911	7,234,061	102,861	4,706,116	61,996
	1912	7,427,494	109,489	5,102,754	72,404

The foregoing figures indicate nothing more than that there is some considerable export movement. The Turkish customs figures were highly inaccurate in former years, and the more recent statistics, especially those for exports, are misleading. The more recent statistics of importation are more nearly accurate as to general quantities and classes, but the country of origin is usually made the same as the country of the port from which last shipped. Austria-Hungary thus gets credit for much German, American, and other goods which are shipped from Trieste and Fiume.

The import of paper, in avoirdupois pounds, for the last two years for which statistics are available were as follows. The figures include the imports for the ports of Tripoli in Africa, Dedeagatch, and Saloniki, which are no longer part of the Ottoman Empire.

Articles.	Year ending Mar. 13, 1911.	Year ending Mar. 13, 1912.	Principal countries from which imported.
	Pounds.	*Pounds.*	
Wrapping papers	28,215,461	26,627,159	Netherlands, Austria-Hungary, Germany, Belgium.
Printing papers	12,669,143	15,703,160	Austria-Hungary, Belgium, Germany.
Writing paper and envelopes	6,457,504	6,646,185	Austria-Hungary, Germany.
Cigarette paper and tubes	5,046,291	5,047,811	Austria-Hungary, Italy, France.
Cardboard	9,668,417	9,239,981	Austria-Hungary, Germany, Netherlands.
Blank books and ledgers	958,246	1,005,634	Italy, Germany.
Miscellaneous papers [a]	3,151,290	4,549,797	Austria-Hungary, Germany, Belgium.

[a] Includes blotting, filter, drawing, tissue, wall, and other unenumerated papers, and excludes playing cards, books, and other manufactures of paper or cardboard.

The paper market here is in a stage of development which is hard to define accurately. No two of the leading dealers agree as to all the essential details concerning any one article or group of articles. This is partly due to the lack of accurate and complete Government statistics and partly to the secrecy arising out of a keen competition that has not yet adjusted itself to American cooperative business methods. Two facts, however, present themselves clearly. First, that up till the time of the great anti-Austro-Hungarian boycott which resulted from the annexation of Bosnia and Herzegovina, Austria-Hungary practically controlled the market in all the principal lines of paper. Since the boycott the Austrian and Hungarian mills have come back strongly, but they have not recaptured their supremacy. The paper that seems to be cheapest rules. Secondly, the countries of northern Europe, especially Scandinavia, have secured direct steamship service and are rapidly gaining their way in the market for cheaper printing and wrapping papers and are to be most seriously considered by any American mills that think of trying to extend the sale of their products.

CUSTOMS AND CREDIT TERMS.

The customs duties are 15 per cent ad valorem. There exists no discrimination in favor of any nation or nations. The nations which are fairly near and have direct and frequent steamship connections do undoubtedly enjoy a certain advantage, and America was greatly handicapped by this fact. The success of Germany in retaining a fair foothold in the market can well serve us as an example, now that there is direct steamship service between America and the Near East by two lines (America-Levant and Hamburg-American). One of the factors in enabling more distant countries to compete is that Swedish, Belgian, and German shipping companies quote very low transportation prices from the factory to Constantinople, taking on themselves any necessary railroad freights from the factory to the port of embarkment. This cooperation between shipper and carrier results in enabling the countries concerned to meet Austrian competition despite all the advantages it has so long enjoyed.

Almost all the paper is sold cash against documents at Constantinople, subject to 5 per cent discount. In some lines the expression "cash against documents" is liberally interpreted and payment is accepted 30, 60, or 90 days late. In the majority of cases documents are taken up from the bankers of the sellers on the arrival of the vessel. All prices quoted above are c. i. f. Constantinople, and all paper as well as other imports are purchased c. i. f. Constantinople. Prices are almost always quoted in francs ($0.193) per 100 kilos (220.462 pounds) and occasionally in Austrian crowns ($0.203) per 100 kilos.

Some few manufacturers (usually French) are represented by traveling salesmen who visit Constantinople once or twice a year. The great majority of mills are represented by commission agents who actively seek to place their products on this market. Most of the larger commission agents have more than one house in each particular line, so that they may be fairly sure to meet the price of the market. It is suggested that French be used in corresponding with firms in this district and that quotations be given in metric weights with prices in francs.

The Government buys some $400,000 worth of paper yearly. Sealed bids for the supplies are received in open competition. The Ministries of War, Marine, and Cadastre buy their own supplies. The Ministry of Finance buys for all the others. These bids are usually not advertised sufficiently long in advance to notify American manufactures, and could be acted upon only by representatives on the spot. There are inclosed stationery used in the Ministry of Pious Foundations and samples of papers used by the customs administration, which buys all papers flat and has them cut and printed as needed.

UNITED KINGDOM.

LONDON.

From Consul General John L. Griffith.

Generally speaking, the finer grades of paper, including handmade, are produced by domestic mills and the cheaper grades are imported. Chiefly among those imported are papers made from wood pulp that is not dried but which passes from the mill to the machine. Such paper possesses a quality that can not be obtained from imported pulp. Special classes of envelope papers, tissues, grease-proof papers of all kinds are imported, as are large quantities of news, due to the fact that the domestic supply is insufficient. Strawboards and wood-pulp boards for box making are not manufactured in the United Kingdom to any appreciable extent. The large supplies of imported "news" come from Scandinavia and from Newfoundland; browns and krafts from Sweden, Norway, and Germany; strawboard chiefly from the Netherlands; millboard and wood-pulp boards from Finland, Sweden, and Germany; tissues are received from Germany, Austria, and France; blotting papers from the United States, Germany, and Sweden; carbon papers chiefly from the United States, and cover papers from the United States, Germany, and France. Common news paper is made chiefly from mechanical pulps, the higher grade printing papers chiefly from chemical pulps; while esparto and rags are used for the manufacture of book paper, and high-class rags for handmade products. By far the greater proportion of the browns consumed in the markets of this country are imported, but it is stated that progress is being made in their manufacture, particularly in the higher grades.

MARKET REQUIREMENTS.

The latest available statistics issued by the Government dealing with the paper trade of the United Kingdom relate to the year 1907, and are published by the Census of Production Office of the Board of Trade. For that year returns were received from factories mainly engaged in the manufacture, coating, and printing of paper (except paper hangings), or in the manufacture of pasteboard, cardboard, or millboard. The manufacture of paper bags by paper-making firms (and in a few cases by firms that were bag makers only) is also included. The aggregate gross value of the output of those factories was returned as $66,286,596, a figure which, however, contains some duplication.

The following statement shows the particulars furnished respecting the output of paper makers (hundredweight = 112 pounds):

Articles.	Quantity.	Value.
	Cwt.	
Paper for writing and drawing and for envelopes	2,366,000	$14,886,623
Paper for printing and for posters, etc	9,091,000	28,683,151
Packing and wrapping paper, biscuit caps, etc	3,764,000	9,888,728
Printed and coated papers (not hangings)	767,000	4,744,938
Other sorts of paper	283,000	2,141,260
Pasteboard, cardboard, and millboard	1,071,000	3,046,429
Paper bags	656,000	2,248,323
Other articles of paper and cardboard	....	287,123
Waste products	....	87,597
Other products	....	180,061
Received for waterproofing, waxing, etc., paper	....	92,463
	....	66,286,596

The printed and coated papers, the pasteboard, cardboard, and millboard, and the paper bags were in part returned by firms that themselves made the paper or board, but in part they were returned by firms that purchased paper or board either imported or made by British manufacturers and returned to them by the Census Office as such. There is therefore some duplication in the foregoing statement. It appears that certain firms making returns of other classes of paper made returns of printed and coated papers, pasteboard, etc., and bags as follows: Printed and coated papers (not hangings), 431,000 hundredweight, valued at $2,511,114; pasteboard, cardboard, and millboard, 646,000 hundredweight, valued at $1,849,270; paper bags, 257,000 hundredweight, valued at $729,975. These quantities, representing the minimum output of these manufactures, are additional to that of the other classes of paper shown in the first statement. In the group "Other articles of paper and pasteboard," values of about $184,927 were made by paper-making firms and represent about 45,000 hundredweight of paper and board.

Taking the paper-making trade as a whole, the value of the output of paper and cardboard and of bags and other articles of paper made in paper mills was estimated, free from duplication, at a sum lying between $61,317,900 and $66,184,400, the exact sum depending upon the extent to which the paper and board for making 1,198,000 hundredweight of printed and coated papers, pasteboard, cardboard, and millboard, paper bags, and articles of paper were imported or were purchased from British paper makers. The total quantity of paper and board produced in the United Kingdom in the year 1907 was estimated at about 17,000,000 hundredweight, valued at something over $58,398,000.

Comparisons between the production in the paper trade and exports and imports during the year 1907 are rendered difficult by the fact that the classification of exports during that year differed from the classification adopted for the Census of Production, which was based on the classification of exports for 1908, while the classification of imports differs from both. In these circumstances the exports for both 1907 and 1908 are given in order to facilitate comparison:

Articles.	Production, 1907.	Exports, 1907.	Exports, 1908.
	Cwt.	*Cwt.*	*Cwt.*
Paper for writing and drawing	2,366,000	1,302,000	219,000
Paper for printing	9,091,000		1,061,000
Envelopes	(a)		20,000
Packing and wrapping paper	3,764,000	243,000	122,000
Printed and coated papers (not hangings)	767,000		14,000
Other sorts of paper and paper articles (excluding bags)	328,000		81,000
Pasteboard, cardboard, etc	1,071,000	[b] 79,000	75,000
Pasteboard, manufactures of	(a)		26,000

[a] Information not available.

[b] Including playing cards, the exports of which amounted to 2,000 hundredweight in 1908.

In 1907 about 11.4 per cent of the paper made in the United Kingdom for writing, drawing, printing, and for envelopes was exported, leaving approximately 88.6 per cent for domestic consumption. The net imports (i. e., imports less reexports) for 1907 were:

Articles.	Quantity.	Value.
	Cwt.	
Unprinted paper on reels	1,689,000	$4,934,631
Unprinted paper not on reels	3,568,000	13,606,734
Printed or coated (not hangings)	163,000	2,097,461
Strawboard	2,179,000	2,988,031
Millboard and wood-pulp board	1,080,000	2,467,315

Imports of packing and wrapping paper were not separately distinguished in 1907, but in 1908 the net imports of unprinted paper not on reels amounted to 4,126,000 hundredweight, of which 2,368,000 hundredweight were paper for packing and wrapping. The total net imports of paper and board in 1907 amounted to 8,679,000 hundredweight, valued at $26,094,173. This includes, however, 2,179,000 hundredweight of strawboard, valued at $2,988,031, it being understood that this class of board is manufactured only in small quantities in the United Kingdom.

In order to obtain an estimate of the products of the trade, under its technical classification, manufacturers were asked by the Census of Production Office to furnish a voluntary statement according to the classification adopted by the Paper Makers' Association of Great Britain and Ireland (Inc.) to correspond with statistics previously published by the association. The information obtained, which relates to 10,324,000 hundredweight, or about 60 per cent of the total quantity of paper and board manufactured in the United Kingdom, was as follows (ton = 2,240 pounds):

Articles.	Quantity.	Selling value at works.
	Tons.	
Handmade paper	1,800	$1,167,960
Machine-made, tub-sized, and air-dried papers of all kinds, excepting those classified separately	19,700	3,864,001
Tissue, cigarette, and copying papers	1,100	369,854
Engine-sized writing and cartridge, fine printing and litho, white or tinted, both machine finished, water finish, supercalendered, and plate glazed, including fine papers made for coating and enameling, and imitation parchments	212,800	18,147,178
Blotting and plate papers	3,100	457,451
News, white middles, and wall papers	121,700	5,834,933
Brown, wrapping, grocery, and packing papers	95,100	4,034,328
Pulp boards, white or tinted, folding box boards, millboards, leather boards, glazed boards, etc., and straw boards	24,600	1,377,219
M. G. envelopes, printing, litho, and cover papers, i. e., pamphlet and copybook backs	8,100	608,312
M. G. wrapping of all kinds, including M. G. krafts and small hands, biscuit caps, wall papers, together with manila papers and glazed casings	18,600	1,459,950
Any other variety	9,600	973,300
Total	516,200	38,294,486

The net output was valued at approximately $22,103,643, which sum represented the total amount by which the value of the gross output exceeded the cost of the material used. The actual cost of materials can not be precisely stated, but it is estimated at a sum between $38,932,000 and $43,798,500.

It is estimated by those conversant with the paper manufacture of the United Kingdom that the production of printing, particularly news, paper has increased at least 25 per cent since 1907, that a smaller increase, estimated at about 6 per cent, has occurred in the production of writing paper, while the increase in the manufacture of browns and other papers has been negligible.

Papers chiefly imported during the year 1913, in order of value, were: Packing and wrapping; printing and writing; strawboards, mill and wood-pulp boards; other printed or coated; and hangings.

SIZES AND USES OF PAPER.

The following table contains an indication of the size of paper in use in the United Kingdom, both by name and by measurement, classified according to the several kinds of paper:

Names	Writing and drawing.	Printing.	Browns and wrapping.	Cartridge and grocery.
	Inches.	*Inches.*	*Inches.*	*Inches.*
Ammunition				24 by 19
Antiquarian	53 by 31			
Atlas	34 by 26			
Cap (bag)			24 by 19½	
Cap (double bag)			30 by 24	
Cap (Haven)			26 by 21	
Cap (Kent)			21 by 18	
Cartridge				26 by 21
Casing			46 by 36	
Colombier	34½ by 23½			
Copy	20 by 16			
Crown		20 by 15		
Crown (double)		30 by 20	30 by 20	30 by 20
Crown (quad)		40 by 30		
Demy	20 by 15½	22½ by 17½		22½ by 17½
Demy (double)	31 by 20	35 by 22½		
Demy (quad)		45 by 35		
Elephant	28 by 23	30 by 23	32 by 24	31 by 22
Elephant (double)	40 by 26½		46 by 31	
Emperor	72 by 48			
Foolscap	17 by 13½			
Foolscap (double)	27 by 17	27 by 17		
Foolscap (quad)	34 by 27	34 by 27		
Foolscap (sheet and third)	22 by 13½			
Foolscap (sheet and half)	24½ by 13½			
Grand eagle	42 by 28			
Hambro' (single)				24 by 18½
Hambro' (double)				30 by 27
Imperial	30 by 22	30 by 22	29 by 22½	30 by 22
Imperial (double)		44 by 30	45 by 29	
Loaf (small double)				21 by 16½
Loaf (large double)				23 by 16½
Lumber-hand			22½ by 17½	22½ by 18
Lump (single)				34 by 24
Lump (extra large)				36 by 24
Lump (double)				42 by 32
Medium	22 by 17½	23½ by 18½		
Middle-hand				22 by 16
Post (small)	19 by 15¼	19½ by 15½		
Post (pinched)	18½ by 14¾			
Post (double)		31½ by 19½		
Post (sheet and half)		23½ by 19½		
Post (large)	21 by 16½			
Post (double large)	33 by 21			
Post (quad large)	42 by 33			
Pott	15 by 12½			
Powder-loaf				26 by 18½
Purple, No. 3				26 by 17
Purple, No. 4				28 by 18½
Royal	24 by 19	25 by 20		25 by 20
Royal (super)	27 by 19	27½ by 20½		
Royal (double)		40 by 25		
Royal (quad)		50 by 40		
Royal-hand				25 by 20
Single (small)				27 by 21½
Single (large)				29 by 23
Small cap			25 by 17	
Small cap (double)			34 by 25	
Small-hand			20 by 15	
Small-hand (double)			29 by 20	
Small-hand (double double)			40 by 30	
Titlers				35 by 29

WEIGHTS AND WHOLESALE PRICES.

There are no special requirements as to size varying from the foregoing table, and the most popular qualities, weights, and finishes of the several classifications are as follows, with an indication, where information is available, of the prevailing wholesale prices:

Classification and sizes.	Quality.	Weight per ream.	Finish.	Wholesale price.
WRITING AND DRAWING.		*Pounds.*		*Per pound.*
Antiquarian	Handmade	240	Rough and plate glazed.	$0.18-$0.36
Atlas	do	100	do	.18- .36
Colombier	do	100	do	.18- .36
Copy	do	18	do	.18- .36
Demy	Machine-made	24, 30	Rough and machine finish.	.12
Demy (double)	do	48, 60	do	.12
Elephant	Handmade	72	Rough	.18- .36
Elephant (double)	do	120, 140	do	.18- .36
Emperor	do	620	do	.18- .36
Foolscap	Machine-made	13, 16	Rough and machine finish.	.08- .12
Foolscap (double)	do	26, 32	do	.08- .12
Foolscap (quad)	do	52, 56	do	.08- .12
Foolscap (sheet and third)	do	14, 17	Machine finish	.08- .12
Foolscap (sheet and half)	do	16, 19	do	.08- .12
Grand eagle	Handmade	140	Rough	.18- .36
Imperial	Machine-made	72	Machine finish	.08- .12
Medium	Handmade	18	Rough	.18- .36
Post (pinched)	Machine-made	20	Machine finish	.08- .12
Post (large)	do	20	do	.08- .12
Post (double large)	do	40	do	.08- .12
Post (quad large)	do	80	do	.08- .12
Pott	do	10, 12	do	.08- .12
Royal	do	42	do	.08- .12
Royal (super)	do	50, 54	do	.08- .12
PRINTING.				
Crown	Machine-made	20	Machine finish	.0375
Crown (double)	do	30, 40	do	.0375
Crown (quad)	do	40, 60	do	.0375
Demy	do	25, 30	do	.0375
Demy (double)	do	60	do	.0375
Demy (quad)	do	120	do	.0375
Elephant	do	72	do	.0375
Foolscap (double)	do	30	do	.04
Foolscap (quad)	do	60	do	.04
Imperial	do	72	do	.04
Imperial (double)	do	144	do	.04
Medium	do	18	do	.04
Post (double)	do	40	do	.04
Post (sheet and half)	do	30	do	.04
Royal	do	40	do	.04
Royal (super)	do	45	do	.04
Royal (double)	do	80	do	.04
Royal (quad)	do	160	do	.04
BROWNS AND WRAPPING.[a]				*Per cwt.*
Cap (bag)	Machine-made	28, 38, 40, 60	Machine glazed	$3.53
Cap (double bag)		56, 76, 80, 120		3.53
Casing	Machine-made	80, 120, 140	Machine glazed	3.96
				Per ream.
Elephant	do		do	$0.91
Elephant (double)	do		do	1.82
				Per cwt.
Imperial	do	40, 60, 70	do	$3.95
Imperial (double)	do	80, 120, 140	do	3.95
Lumber-hand	do		Machine finish	
				Per ream.
Small-hand (double)	do	17	do	$0.67

[a] The usual sizes are casing, imperial, and double imperial.

Classification and sizes.	Quality.	Weight per ream.	Finish.	Wholesale price.
CARTRIDGE AND GROCERY.		*Pounds.*		*Per pound.*
Ammunition	Machine-made			
Cartridge, 21 by 26, 22 by 28, and 22 by 30 inches.			Rough	$0.04
MISCELLANEOUS.				
Bible, 20 by 30 inches	Machine-made	11	Machine finish	.04
India	do		do	.06
Manila, 30 by 36 inches	do	112	do	.04
Bogus manila, 30 by 36 inches	do	112	do	.04
Wall, 12 yards by 22 inches	do	[a] 13	do	.025
Kraft, 29 by 45 and 36 by 46 inches	do	100, 120	do	.03
Tissue, 20 by 30 and 19 by 29 inches	do	7, 8	do	.035
Blotting, 17½ by 22½ inches	do	38	do	.08
Cover, 18 by 23, 20½ by 25, and 20½ by 30½ inches.	do	40, 50, 60	Rough	$0.04- .045
				Per ton.
Strawboard, 22 by 30 inches	do	[b] 6	do	$29.20

[a] Ounces per roll, unprinted.

[b] Ounces per sheet.

The paper in general use for social and commercial correspondence is of a fairly high grade.

The kinds of boards chiefly produced in the United Kingdom may be classified under the heading of combination box boards, and the production is stated to be ample to meet the demand. Strawboard, wood-pulp board, and leather board are chiefly imported. A waste paper of chip board is made to some extent, and during the period of the comparatively high prices for the Dutch product in 1913 the consumption of the former boards was increased, but the prices have now fallen to $19.46 c. i. f. with prospects of going still lower.

HOME PRODUCTION.

The materials available in the United Kingdom for the manufacture of paper are practically limited to rags and waste materials, such as paper, rope, and jute. The following is a list of prices now (May, 1914) current for paper-making materials in the United Kingdom:

CHEMICALS.

Quotations are nominally as follows:

	Per ton.
Alkali, ammonia, 58 per cent, f. o. b. Liverpool, according to package	$18.50–$19.47
Alum, ground, tierces, f. o. b. Liverpool, 2½ per cent	29.81
Alum, ground, barrels, f. o. b. Liverpool, 2½ per cent	30.41
Alum, ground, tierces, f. o. b. Hull, 2½ per cent	29.81
Alum, ground, tierces, f. o. b. Glasgow, 2½ per cent	31.63
Alum, lump, barrels, f. o. b. Liverpool, 2½ per cent	27.98
Alum, lump, tierces, f. o. b. Liverpool, 2½ per cent	27.37
Alum, lump, barrels, f. o. b. Hull, 2½ per cent	27.37
Alum, lump, tierces, London, 2½ per cent	29.81
Alum, lump, tierces, f. o. b. Glasgow, 2½ per cent	29.81
Alumina sulphate, bags, f. o. r. Tyne, net	18.26
Alumina hydrate, 63–64 per cent	49.88
Aluminoferric cake, slabs, Liverpool	13.89
Aluminoferric cake, tierces, Liverpool	15.82
Alumina cake, slabs, Glasgow	13.89
Blanc fixe, f. o. r. Tyne, net	29.20

	Per ton.
Blanc fixe, f. o. r. Manchester, net	$29.20
Bleach, f. o. r. Manchester, net	27.37
Bleach, softwood, f. o. r. Lancashire, net	26.77
Bleach, hardwood, f. o. b. Liverpool, net	27.37
Bleach, softwood, landed London, net	27.97
Borax, crystals, f. o. b. Liverpool, net	85.16
Borax, powdered, net	90.03
Caustic white, 77 per cent, f. o. b. Liverpool for export, net	48.66
Caustic white, 76 per cent, f. o. b. Liverpool for export, net	48.66
Caustic white, 74 per cent, f. o. b. Liverpool for export, net	47.45
Caustic white, 70 per cent, f. o. b. Liverpool for export, net	45.02
Caustic white, 60 per cent, f. o. b. Liverpool for export, net	40.15
Caustic white, 70 per cent, f. o. r. Lancashire, net	45.02
Caustic bottoms, f. o. r. Lancashire, net	31.63
Sulphite of soda, 5-7 hundredweight casks, f. o. b. Tyne, net	27.98
Hyposulphite of soda, f. o. b. Tyne, net	27.98
Oxalic acid, f. o. b. Liverpool, net ... per pound	0.5125
Salt cake, f. o. r. Lancashire	10.34
Satin white, f. o. b. London	24.33
Satin white, f. o. b. Manchester, net	21.90
Soda ash, carbonated, 52 per cent, f. o. b. Liverpool, net	33.46
Soda ash, carbonated, 48 per cent, f. o. b. Liverpool, net	32.82
Soda ash, carbonated, 52 per cent f. o. r. Widnes, net	32.24
Soda ash, carbonated, 48 per cent, f. o. r. Widnes, net	31.63
Soda ash, caustic, 48 per cent f. o. b. Liverpool	32.82
Soda ash, carbonated, 52 per cent, f. o. b. Liverpool	33.46
Sal ammoniac, firsts, f. o. b. Liverpool	214.13
Sal ammoniac, seconds, f. o. b. Liverpool	204.39
Soda crystals, bag, f. o. b. Tyne, net	12.17
Soda crystals, bag, ex ship Thames, 2½ per cent	11.56
Soda crystals, bags, f. o. b. Liverpool, 5 per cent	14.72
Sulphate of ammonia, f. o. b. Liverpool	59.01
Sulphate of copper, f. o. b. Liverpool	107.06
Sulphur, rolls, f. a. s. works, net	34.07
Sulphur, flowers, f. a. s. works, net	38.93
Sulphur, recovered, f. a. s. works, net	31.63

STRAW PULPS.

Prices c. i. f. English and Scotch ports:

German, dry, No. 1	$63.26
Dutch, dry, No. 1	63.26
Dutch, dry, No. 2	58.40

CHEMICAL WOOD PULPS.

Great Britain.

Prices c. i. f. London, Manchester, Preston, Granton, etc.:

	Per ton.
Sulphite, bleached, good quality	$57.18–$59.62
Sulphite, easy bleaching, first quality	42.58– 44.40
Sulphite, "news" or strong quality	37.71– 38.32
Soda, unbleached, first	37.10– 40.13
Soda, unbleached, strong	35.29– 38.93
Soda, kraft	38.93– 39.51

Sweden.

F. o. b. Goteborg:

Sulphite, extra bleached	$53.50–$61.52
Sulphite, easy bleaching	40.93– 42.28
Sulphite, strong	36.12– 37.45
Soda, easy bleaching	36.12– 37.45
Soda, kraft	36.12– 38.50

France.

C. i. f. Rouen:

	Per 100 kilos.
Sulphite, unbleached, first quality	$4.44– $4.63
Sulphite, ordinary	3.91– 4.06
Sulphite, ordinary, second quality	3.48– 3.67
Sulphite, bleached, superior	6.13– 6.57
Sulphite, bleached, inferior	5.21– 5.41
Soda and sulphate, unbleached	4.06– 4.25
Soda and sulphate, second quality	3.86– 4.06

United States.

Foreign, ex dock:

	Per cwt.
Sulphite, bleached	$2.70– $3.05
Sulphite, easy bleaching	2.05– 2.20

United States—Continued.

	Per cwt.
Sulphite, unbleached	$1.90–$2.00
Soda, bleached	2.60– 2.80
Soda, unbleached	1.90– 2.10
Kraft pulp	1.80– 2.00
Domestic, delivered mill:	
Sulphite, bleached	2.80– 3.00

United States—Continued.

	Per cwt.
Sulphite, unbleached	$1.90–$2.20
Soda, bleached	2.10– 2.25

Canada.

	Per ton.
Sulphite, bleached	$56.00–$57.00
Sulphite, unbleached	42.00– 43.00

MECHANICAL WOOD PULPS.

Great Britain.

	Per ton.
Prices, c. i. f. London, Manchester, Preston, Granton, etc.:	
Pine, 50 per cent moist, unwrapped, prompt	$10.22–$10.95
Pine, moist, forward delivery	10.95– 11.44
Pine, dry, prompt delivery	20.68– 22.02
Pine, 50 per cent dry, forward delivery	21.90– 23.12

Sweden.

F. o. b. Goteborg and Baltic ports:	
Pine, 50 per cent moisture	$8.02– $8.83
Pine, dry	19.80– 20.88

France.

	Per 100 kilos.
C. i. f. Rouen:	
Pine, 50 per cent moisture	$2.12– $2.32
Pine, dry	2.41– 2.51
Aspen, dry, fine dry	3.09– 3.19
Brown (half chemical), 50 per cent moisture	2.22– 2.41
Brown (half chemical), dry	2.51– 2.61

Canada.

	Per ton.
At mill	$15.00–$16.00

ESPARTO.

	Per ton.
Prices ex ship London or f. o. r. Leith, Granton, Garston, and Tyne docks:	
Spanish, fair to good	$24.33–$24.94
Spanish, fine to best	26.76– 27.98
Oran, fair to good	17.03– 18.25
Oran, first quality	20.69– 21.30
Tripoli, hand picked (nominal)	19.47– 20.69
Tripoli, fair average (nominal)	17.64– 18.25
Bona and Philippeville, first quality	$20.69–$21.30
Sfax and Gabes	19.47– 20.08

Esparto pulp.

Bleached, first quality, c. i. f. principal English ports	$72.99–$92.46

FOREIGN RAGS.

French.

Quotations f. o. b. Rouen:	Per ton.
Extra linens	$6.09
White linens, No. 1	5.60
White linens, No. 2	4.87
White linens, No. 3	3.89
White linens, No. 4	2.92
White linens, No. 5	1.46
Gray linens, strong	3.41
Gray linens, extra	4.14
White cotton, No. 1	4.63
White cotton, No. 2	3.41
White cotton, No. 3	2.92
White cotton, No. 4	2.19
White cotton, No. 5	1.46

French—Continued.

	Per ton.
White knitted	$5.36
Muslins	2.31
Extra-light prints	2.67
Light prints	2.19
Dark prints	.97
Blue cottons, No. 1	1.94
Blue linens, No. 1	2.19
Fustians	1.22
Old bagging, solid	1.46
Old bagging, common	.93
Hemp, tarred in coils	3.04
Hemp strings, new cuttings	2.67
White linen	9.24
Unbleached linen	8.75

French—Continued.

	Per ton.
Gray linen	$6.57
Extra white cotton	6.81
Ordinary white cotton	5.84
Curtain cuttings	5.11
Stay cuttings	4.38
Extra-light prints	4.14
Unbleached cotton	7.30
Oxford	4.63
Flanellettes	4.63
Blue cotton	2.92

German.

Quotations f. o. b. English ports:

NWC	$5.35–	$7.54
SPFFF	5.35–	6.08
SPFFF and SPFF	4.38–	4.63
SPFF	4.14–	4.38
SPF	2.67–	3.40
Light prints	2.06–	2.30
Fustians	.85–	1.22
CSPFF	2.43–	3.40
CSPF	1.94–	4.63
Dark blue (selected)		1.94
Jute, No. I	.85–	1.09
Jute, No. II	.30–	.36
Gunny	1.09–	1.46
Extra new light prints	4.38–	4.63
Mixed colored cottons	.97–	1.17
Dark cottons	.85–	1.09
Gray linens, I	2.67–	3.16
Gray linens, II	1.22–	1.71
CSPFFF	3.40–	4.14
Extra new light blue cottons	3.16–	3.40
Extra new unbleached cottons	6.33–	6.57

Belgian.

Quotations, f. o. b. Goole or Thames:

	Per ton.
White linens, No. 1	$5.84
White linens, No. 2	4.75
White linens, No. 3	3.16
Fines, mixed	3.40
Fines, dirty	$2.19
Gray linens, strong	3.16
Gray linens, extra	3.89
Blue linens	2.67
White cottons, No. 1	4.26
White cottons, No. 2	3.52
Outshots	2.92
Seconds	1.94
Prints, extra light	2.19
Fustians, light	1.46
Mixed cottons	1.70
Hemp strings, old white	2.43
House cloths	1.46
Old bagging, solid	1.22
Old bagging, common, new	.85
White and cream linens	9.73
White cuttings, No. 1	7.30
Unbleached cuttings	6.33
Print cuttings, new light	3.89
Flax waste, washed and dried	2.43
Flax waste, fair	1.94
Flax card waste	1.46
Hemp waste, No. 1	1.94
Hemp waste, No. 2	.73

Dutch.

Free English or Scotch ports:

Best fines	$4.14
Second fines	3.16
Third fines	2.12
Blues	1.94
Light cottons	2.19
House cloths	.97
Red and white	1.94
Hemp rope in coils	2.12
Small ropes	1.15
White manila ropes	2.67
Colored cottons	1.22
Light fustians	1.46
Dark	1.09
Gray linen	2.92
Tarred	1.82
Sound bagging	.97
Common	.61

HOME RAGS.

	Per ton.	
New white cuttings	$4.63–	$5.60
Fines, selected	4.38–	4.63
Fines, good London	3.16–	3.65
Outshots, selected	2.55–	3.16
Outshots, ordinary	2.30–	2.55
London seconds	.24–	.36
Country seconds	1.34–	2.06
London thirds	.18–	.24
Country	.30–	.36
Canvas, No. 1	2.92–	3.16
Canvas, No. 2	2.30–	2.55
Canvas, No. 3	.97–	1.46
Mixed rope	.61–	.85
White rope	1.09–	2.79
White manila rope		2.37
Coil rope	$1.94–	$2.30
Bagging	.42–	.61
Gunny	.61–	.85

Bristol.

Fines	$4.14
Outshots	2.55
Seconds	1.82
Thirds	.73
Mixed bagging	.73
Clean canvas	3.53
Second canvas	2.55
Light prints	1.70
Hemp coil rope	2.30
Tarred manila	1.70

Manchester.

	Per ton.
Fines	$3.52– $3.77
Outshots, best	2.19– 2.43
Outshots, ordinary	1.94– 2.06
Seconds	1.22– 1.46
Thirds	.61– .73
Blues	1.22– 1.46
Bagging	.85– 1.09
Bagging, common	.49– .61
White manila rope	2.43– 2.67
Surat tares	1.46– 1.70
Gunny	1.46– 1.70

Edinburgh.

Superfines	$4.50
Outshots	3.28
Mixed fines	3.65

Edinburgh—Continued.

	Per ton.
Common seconds	$2.43
First seconds	2.92
Light prints	2.12
Common prints	1.28
Canvas, best	3.65
Canvas, second	2.55
Black cottons	.97
W. manila rope	$2.55–2.67
Tarred manila rope	1.64
Tarred hemp rope	2.19
Rope ends, new	1.22
Rope ends, old	.85
Bagging	.73
Bagging, clean	1.03

WASTE PAPER.

	Per ton.
Cream shavings	$2.43
Fine shavings	2.19
Second shavings	2.06
White wood	1.34
Mixed wood (containing colored)	$0.85– .97
White waste	1.22
Wood-pulp cuttings	.73– .97
Blue paper	.73– .97
Crushed news	.61

	Per ton.
Ledgers	$1.82
Heavy letter	1.15
Light letter	.85
Light browns	$0.73– .85
Dark browns	.49– .67
Books and pamphlets	.91
Casings	.97–1.09
Strawboard cuttings	.42
Jacquards	.61

BALING TWINE.

Hemp, $0.1075, $0.1225, and $0.1275 per pound; mixed, $0.0975, $0.1125, and $0.1175 per pound.

JUTE.

	Per ton.
Good white to best	$122.00–$146.00
Good	107.00– 117.00
Medium	92.00– 102.00

	Per ton.
Common	$73.00–$88.00
Rejections	92.00– 68.00
Cuttings	92.00– 56.00

SIZING.

Prices are nominally as under:

	Per cwt.
English gelatine	$15.33–$22.63
Foreign gelatine	17.76– 25.06
Fine Scotch glues	10.46– 12.89
Best long Scotch glues	9.00– 10.46
Common black	7.54– 8.03
"Town" glues	8.52– 9.73
"Bone" glues	8.03– 9.00
Foreign glues	8.03– 8.76
Bone size	2.30– 2.67

	Per cwt.
Gelatine size	$2.43– $2.92
Dry B. A. pieces	9.73– 10.95
Dry English pieces	6.08– 8.52
Wet English pieces	1.58– 1.88
Wet sheep pieces	.49– .91
Buffalo hide shavings	6.08– 9.73
Buffalo picker waste	6.57– 7.30
Dry fleshings, ex picker waste	6.08– 6.57

ROSIN.

Ex-wharf, less 2½ per cent discount and tare 20 per cent: BC, $2.37; D, $2.40; E, $2.43; F, $2.46; G, $2.49; H, $2.55; I, $2.67; K, $2.92; M, $3.40; N, $3.65; WG, $3.72; WW, $3.89.

STARCH.

D. o. r. London, less 2½ per cent:

	Per ton.
Maize, crisp	$73.00
Maize, pearl	61.00
Maize, powder	75.00
Maize, special	80.00
Farina, prime	85.00
Farina, B. K. M. F	112.00
Delivered:	
Rice, special (in chests), less 2½ per cent	97.00

	Per ton.
Rice, crystal (in bags), less 2½ per cent	$90.00
Rice, granulated (in bags), less 2½ per cent	85.00
Rice, waste, less 2½ per cent	63.00
Dextrine	97.00

COLORS.

Nominal prices:

	Per ton.
Mineral black	$17.03
Black, carbon	273.00
Ocher, English and Irish	[a] 19.46
Ocher, French	[a] 19.46
Turkey red	[a] 38.93
Red oxide and Venetian red	[a] 24.33

	Per ton.
Umber, Derbyshire	[a] $19.46
	Per cwt.
Chrome, pure	12.16
Yellow, Imperial	3.04
Yellow, Bordeaux	3.04

Paste colors, with 40 per cent of color (less 2½ per cent d/d):

	Per cwt.
Orange pulp	$12.16
Golden yellow pulp	8.76
Lemon yellow pulp	8.76
Prussian yellow	8.76
Green, free from arsenic	8.76
Paste blue, 33 per cent	7.30

	Per cwt.
Paste blue, 40 per cent	$8.27
Paste blue, 50 per cent	9.73
Paste black, 33 per cent	2.43
Paste black, 40 per cent	3.40
Paste black, 50 per cent	3.89

LIME.

	Per cwt.
Per ton, f. o. r	$2.67

LOADINGS, ETC.

China clay: In bulk, f. o. b. Cornwall, $3.89 to $8.72 (highest grade) per ton; bags $1.22 and casks $2.67 per ton extra; delivered Lancashire, $11.19 (for best papers), and commoner qualities $5.34 to $8.39 per ton; best f. o. r. London, in casks, $11.92 per ton; f. o. b. Liverpool, in 5-cwt. casks, $9.73 to $12.16 for export.

French chalk: W. E., W. F. G., and other brands, $14.36 to $21.77 per ton, according to quality, delivered in most paper-making towns; also f. o. b. to Glasgow, Belfast, and London at same price.

Italian chalk: Finest brands, f. o. b. Manchester, Liverpool, Belfast, or London, I. W. A., "Portland Mills," and "Swan" marks, $18.85 to $22.43 per ton of 10 bags.

Papermakers' plaster, $3.89 per ton and upward delivered.

Superfine hardening, delivered mills, $12.16 per ton and upward.

Patent hardening, 2-ton lots, f. o. r. Lancashire, $15.20.

Mineral white (also known as terra alba, and sulphate of lime), per ton f. o. r. at makers' works: Superfine, first and seconds, $5.84 to $6.57; fine, best picked, white, finely ground; fine, second quality; pottery, best quality; and pottery, No. 2 quality, $4.38 to $5.60.

Gypsum: Light pink, seconds, brown, and thirds, selected, $2.06 to $4.14.

Terra alba and gypsum delivered any Lancashire or Yorkshire station, about $2.43 per ton extra, except Manchester, which is only $1.71 per ton extra; delivered London stations, about $1.71 per ton extra.

Bauxite, minimum alumina 60 per cent, $3.77 f. o. b.

Sulphate of alumina, $12.77 to $15.02 per ton delivered to mills.

Sulphate of barytes, No. 1, $15.20; No. 2, $12.65; No. 3, $10.22; No. 4, $8.72 per ton, less 2½ per cent.

Magnesite, containing 94 to 96 per cent carbonate of magnesia, raw ground, $21.89; calcined, $31.14.

Magnesite, in lump, $9.73 per ton.

Satinite, $16.06, in casks, f. o. b. Liverpool or Manchester.

Chloride of zinc, $34.67 per ton.

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[a] Higher prices according to strength and shade.

Rags are generally used for the higher grades of paper; and other materials, in order of quantity consumed, are wood pulp, esparto grass, and waste, including rags, old paper, jute bags, old rope, etc. Pulp from bamboo from the Far East, and from reeds in the neighborhood of the Black Sea, is being used experimentally for some of the finer qualities of paper. Straw is not used to any great extent.

The following table indicates the number of paper-making mills in the United Kingdom, the number of firms engaged in the trade, and the number of machines and vats in the several mills:

Items.	England and Wales.	Scotland.	Ireland.
Mills making paper	193	56	8
Number of firms	145	51	5
Number of machines	435	117	15
Number of vats	105	....	....
Mills making millboards	35	3	....

The following table gives a general classification of the various papers produced in the United Kingdom and the number of mills engaged in their manufacture:

Mills producing—	England and Wales.	Scotland.	Ireland.
Writing papers, handmade	15	....	....
Writing papers, machine-made	39	....	1
Writing paper, machine or tub sized	....	10	....
Writing papers, engine-sized	34	26	1
Printing, dry printing, and news	74	28	1
Long elephants	14	....	1
Cartridges	63	24	2
Grocery papers, white and colored	20	7	....
Small hands	18	7	....
Brown papers, all kinds	58	13	4

STATISTICS OF MILLS.

Following is a detailed list of papers produced in the United Kingdom, with the number of mills in England and Wales, Scotland, and Ireland producing the same:

	England and Wales.	Scotland.	Ireland.
Account-book manufacturers (machine-made)	20	7	1
Ammunition papers	3	1	
Backing papers	3		
Bag papers and paper bags	23	4	1
Bank note and bill papers	10		
Banks	24	4	1
Blottings	14	6	
Bowl papers	1	2	
Box boards	5		1
Browns	57	14	4
Butter papers	7		1
Caps	31	9	1
Cards (see also loom cards)	12	5	1
Carpet felt papers	1	3	1
Carriage panels	4		
Cartridges	55	15	1
Casings	32	9	2
Chart papers	8	10	
Check papers	12	1	
Cigarette papers	3		
Collar papers	2		
Colored papers	35	12	2
Copyings	8	3	
Covers	14	2	2
Cutlery papers	5		
Drawings (machine-made)	24	5	
Drying royals	4		
Duplex papers	8	9	
Enameled papers	16	9	
Enameling papers	8	3	
Engine boards	4		
Envelope papers	33	25	1
Filtering papers	6	3	
Fly papers	2	1	
Foil papers	8	1	
Glazed boards	8		
Grease-proof papers		1	
Grocery papers	19	4	
Gun wadding	1		
Handmade papers (drawing, account book, writing, etc.)	15		
Hosiery papers	11	4	
Imitation art papers	9	7	
Kraft papers	19	1	
Leather boards	16	2	
Lithographic papers	19	16	1
Loans	22	2	
Long elephants	14	3	
Loom cards	19		
Manifold papers	1		
Manila	28	11	2
Marble papers	2		
Middles	16	6	1
Millboards	16	2	
Mill wrappers	19	9	1
Music papers	8	10	
News	30	7	1
Parchment (imitation)	15	2	1
Pasteboards	9	6	
Pin and needle papers	5	1	
Plate papers	6	12	
Portmanteau board	10		
Press boards and pressings	13	9	
Printings	56	28	2
Pulp boards	7	8	
Railway tickets	2	1	
Royal hands	10	3	
Sampling papers	6	1	
Sealings	7	4	
Shops	4	1	
Ships	7		
Small hands	17	6	
Stereotyping papers	5	3	
Tea papers	10	6	1
Tips	3		
Tissues	6		
Tobacco papers	7	1	
Toilet papers	2	1	
Tracings	2		
Tube papers	3	1	
Typewriting papers	12	4	1
Waterproof papers	5	1	
Waxed papers	2		
Wrappings	9		
Writings (machine made)	47	27	1

A general estimate of the output of the paper mills of the United Kingdom was given above under the subheading "Market requirements."

Very little pulp is produced in the United Kingdom. Two or three companies manufacture sulphite wood pulp for their own consumption.

According to the report of the Census of Production Office for the year 1907, the net output per head of persons employed in the paper trade was valued at nearly $540. The average number of persons employed on the last Wednesdays in January, April, July, and October (1907) in the manufacture of paper was returned as 40,955, made up of 38,642 wage earners and 2,313 salaried persons, the total number being distributed by age and sex as follows: Males under 18 years, 3,542; males over 18 years, 24,079; females under 18 years, 2,924; females over 18 years, 10,410.

SCALES OF WAGES.

The latest available official detailed statistics relating to the cost of labor in paper mills in the United Kingdom are those compiled by the Board of Trade for the last pay week of September, 1906, and are as follows:

Occupations and basis of pay.	Number.	Average full-time earnings.
MEN 20 YEARS OF AGE AND OVER.		
Foremen	230	$12.61
Boilers:		
Time	140	5.62
Time and bonus	55	6.41
Washers, breakers, and bleachers:		
Time	311	5.44
Time and bonus	82	7.12
Soda recovery men: Time	89	5.98
Beatermen:		
Time	98	8.76
Time and bonus	122	9.89
Piece	76	13.27
Beatermen's assistants:		
Time	300	5.11
Time and bonus	100	6.20
Paper-machine men:		
Time	148	10.28
Time and bonus	211	10.44
Piece	74	14.58
Vatmen (handmade paper): Piece	23	11.98
Couchers (handmade paper): Piece	38	11.23
Dry workers and finishers (handmade paper): Piece	41	11.23
Cylinder men:		
Time	155	5.96
Time and bonus	36	6.75
Calenderers and glazers:		
Time	186	5.68
Time and bonus	86	6.61
Paper cutters and rereelers:		
Time	322	6.16
Time and bonus	50	7.58
Tiers-up:		
Time	212	5.84
Piece	143	7.80
Warehousemen and packers: Time	123	5.86
Mechanics: Time	426	8.66
Enginemen and stokers: Time	463	6.81
General laborers: Time	945	5.13
MEN 20 YEARS OF AGE AND OVER—continued.		
Other men:		
Time	829	$5.88
Time and bonus	191	8.68
Piece	188	7.62
Total	6,493	7.06
APPRENTICES (ALL AGES) AND BOYS UNDER 20 YEARS.		
Full timers:		
Apprentices: Time	188	2.59
Paper cutters: Time	419	2.02
Other lads and boys—		
Time	1,186	2.81
Piece	70	2.79
Half timers: All occupations—Time	20	.77
Total	1,883	2.59
WOMEN 18 YEARS OF AGE AND OVER.		
Rag sorters:		
Time	262	2.45
Piece	368	2.65
Rag cutters:		
Time	62	2.33
Piece	142	2.39
Paper sorters (finishing department):		
Time	489	2.71
Piece	1,594	3.22
Other women:		
Time	389	2.65
Piece	245	2.85
Total	3,551	2.89
GIRLS UNDER 18 YEARS OF AGE.		
Full timers: All occupations—		
Time	467	1.68
Piece	145	2.37
Half timers: All occupations—Time	12	.85
Total	624	1.82

The following table, taken in connection with the one immediately preceding, shows the number of hours constituting full time and the number of wage earners in the paper mills of the United Kingdom, according to the hours worked:

Full-time week.	Wage earners.
Under 44 hours	210
44 and under 46 hours	488
46 and under 48 hours	378
48 and under 50 hours	73
50 and under 52 hours	394
52 and under 54 hours	294
54 and under 56 hours	913
56 and under 58 hours	6,048
58 and under 60 hours	2,432
60 hours	2,692
Above 60 hours	1,225
Total	15,147
Average hours in a full week	56.9

The average number of holidays during the year 1906 throughout the United Kingdom was seven days.

Since 1906 hours, wages, and conditions of labor have been very much modified. It is estimated that a working week is now three to five hours less and wages have sensibly increased in all mills as a partial consequence, and more holidays are now allowed than then. It is also estimated that the increase in wages has amounted to about 10 per cent. In one of the representative factories producing news, the employees work 130 hours per week in two shifts, there being five 24-hour days, and one 10-hour day, the machines stopping at 4 p. m. on Saturday. In this mill the cost of operating one machine for one week is given as follows: Machine man (two shifts), $51.10; dry man, (two shifts), $29.20; assistant dry man (two shifts), $17.03; total, $97.33. The average production of such machine is given at 190 tons per week.

Another large producer of news reports that the cost of manufacture ranges from $42.58 to $49.88 per ton at the mill. The hours of labor in his mill are 133 hours per week, and the cost of wages varies from $3.04 to $4.38 per ton, including cost of superintendence.

A prominent manufacturer of combination boards advises that the total wages paid to workers engaged on one machine amounts to $61.33 per week, made up as follows: One machine tender, $16.79; one back tender, $10.95; one screen boy, $4.75; one felt boy, $6.57; one calender boy, $4.75; four cutter boys, $17.52; total, $61.33. The average weekly production of such machine is placed at 300 tons, with an average value of about $8,760.

The equipment of paper mills in the United Kingdom is almost exclusively supplied by British manufacturers. Very few foreign machines are in operation, there being four American machines in one large mill and two German machines—remodeled - in another. Formerly American machines were almost exclusively used in board mills, but latterly the English makers have secured part of the trade. There are no Continental-made machines running in board mills in the United Kingdom. All machinery for making coated paper is imported from Germany. During the last year British paper-makers' engineers have supplied machines and equipment to Canada, Spain, France, Mexico, Sweden, Norway, Australia, Russia, Belgium, Siberia, Italy, and the United States.

EXPORT TRADE.

During the year 1912, the last year for which detailed statistics are available, the exports of paper from the United Kingdom and the countries of destination were as indicated below. The figures for 1908 are also given, in order to afford a basis for comparison. The quantities are in hundredweight of 112 pounds.

Kinds of paper and countries.	1908		1912	
	Quantity.	Value.	Quantity.	Value.
WRITING PAPER.	*Cwt.*		*Cwt.*	
Russia	880	$21,556	890	$26,240
Sweden	1,026	12,857	479	7,451
Germany	2,210	37,078	2,212	41,175
Netherlands	2,657	21,705	687	9,879
Belgium	2,230	29,019	3,891	49,497
France	8,262	110,990	6,374	127,264
Egypt	5,489	47,755	3,239	32,391
China (other than British)	3,764	37,092	3,755	40,752
Japan and Formosa	3,269	39,949	7,663	93,738
United States	2,681	46,460	1,895	36,688
Chile	1,874	23,155	1,923	28,435
Brazil	1,274	23,359	1,646	27,943
Uruguay	1,000	11,242	910	10,181
Argentina	8,329	107,759	5,228	68,384
Other foreign countries	8,114	106,454	5,895	93,300
Total to foreign countries	53,059	679,430	46,687	693,318
Cape of Good Hope	11,431	107,404	7,299	71,601
Natal	6,711	64,145	5,677	55,682
British India:				
Bombay and Karachi	16,173	141,264	11,953	111,380
Madras	6,865	60,014	5,906	52,875
Bengal	9,329	105,452	7,135	93,611
Eastern Bengal and Assam	59	1,041	6	170
Burma	2,073	19,184	809	10,448
Straits Settlements	2,802	31,827	3,349	36,693
Ceylon	3,671	40,436	2,594	27,549
Hongkong	1,829	17,563	1,640	15,621
Australia:				
Western	2,873	27,792	4,330	39,774
South Australia and Northern Territory	7,195	52,519	7,676	69,124
Victoria	18,447	166,580	33,449	278,354
New South Wales	23,869	191,735	29,295	245,403
Queensland	7,352	59,585	8,086	64,023
Tasmania	872	7,689	1,029	9,538
New Zealand	23,806	208,603	23,002	197,390
Canada	7,434	77,514	5,960	72,321
British West India Islands	2,337	28,293	1,644	19,636
Other British possessions	10,580	130,301	9,918	120,329
Total to British possessions	165,708	1,538,941	170,757	1,591,522
Total writing paper	218,767	2,218,371	217,444	2,284,840
PAPER FOR PRINTING.				
Sweden	1,728	14,984	2,129	16,049
Denmark	2,100	13,918	5,276	33,783
Germany	6,290	52,222	12,266	74,019
Netherlands	23,994	141,230	36,296	205,035
Belgium	24,884	162,292	48,100	297,270
France	85,702	541,422	118,784	690,960
Portuguese East Africa	5,155	21,490	6,526	27,520
Italy	2,311	18,896	2,327	20,001
Egypt	19,011	108,596	14,616	78,540
Siam	9,946	48,163	8,994	44,703
China (other than British)	22,754	116,771	38,276	206,792
Japan and Formosa	67,032	330,162	171,604	801,055
United States	7,774	72,121	23,971	156,361
Chile	6,899	37,476	10,936	58,943
Brazil	6,194	25,437	8,738	49,341
Uruguay	2,202	12,293	4,233	23,924
Argentina	18,969	73,459	19,769	149,577
Other foreign countries	12,993	89,110	20,114	134,884
Total to foreign countries	325,938	1,880,042	552,955	3,068,757
Cape of Good Hope	38,989	178,133	79,998	382,045
Natal	16,200	78,818	27,118	136,539
British India:				
Bombay and Karachi	74,443	336,654	104,598	480,032
Madras	41,926	193,496	66,813	296,054
Bengal	35,543	163,636	47,867	234,828
Eastern Bengal and Assam	157	788	35	175
Burma	14,634	62,783	19,628	86,302
Straits Settlements	6,572	30,605	14,390	67,955
Ceylon	13,550	73,381	19,365	93,865
Hongkong	4,305	21,612	10,486	52,013

Kinds of paper and countries.	1908		1912	
	Quantity.	Value.	Quantity.	Value.
PAPER FOR PRINTING—continued.				
Australia:	*Cwt.*		*Cwt.*	
Western	10,057	$50,368	22,354	$113,491
South Australia and Northern Territory	25,521	109,316	42,640	167,296
Victoria	174,783	612,424	258,368	920,766
New South Wales	90,855	409,827	176,119	730,481
Queensland	14,142	73,299	25,206	128,933
Tasmania	1,858	9,456	2,075	11,139
New Zealand	95,955	403,087	146,974	588,359
Canada	49,976	308,862	121,948	715,463
Other British possessions	25,427	142,291	43,567	223,104
Total to British possessions	734,893	3,258,836	1,229,549	5,428,830
Total paper for printing	1,060,831	5,138,878	1,782,504	8,497,587
PACKING AND WRAPPING PAPER.				
Germany	4,488	60,078	7,014	68,666
Java	682	1,927	109,912	106,936
Belgium	993	9,178	8,468	46,518
France	6,119	48,246	7,789	42,830
China (other than British)	4,164	16,984	4,742	10,959
United States	7,826	102,357	11,310	178,771
Other foreign countries	14,880	86,467	65,809	187,896
Total to foreign countries	39,152	325,232	215,044	642,573
Cape of Good Hope	9,710	36,192	12,665	50,851
Natal	3,175	15,792	6,798	21,617
British East Indies	26,749	104,396	516,149	607,558
Australia	10,598	47,146	12,499	66,417
New Zealand	3,230	15,251	5,431	19,466
Canada	12,892	81,451	20,285	150,355
British West India Islands	3,829	24,318	3,454	18,546
Other British possessions	12,541	52,222	56,071	113,019
Total to British possessions	82,724	376,768	633,352	1,047,829
Total packing and wrapping paper	121,876	702,000	848,396	1,690,405
PRINTED PAPER HANGINGS.				
Germany	842	20,211	3,121	65,522
Netherlands	942	10,122	1,378	22,795
Belgium	3,016	39,059	3,625	50,923
France	9,988	169,714	9,943	180.571
China (other than British)	2,321	18,667	1,051	11,456
United States	7,817	129,011	23,391	243,831
Argentina	761	12,556	2,850	46,465
Other foreign countries	7,688	111,613	12,504	172,283
Total to foreign countries	33,375	510,953	57,863	793,846
Cape of Good Hope	4,397	44,849	6,564	62,097
Natal	1,496	15,412	2,060	21,301
Transvaal	3,975	45,711	7,253	80,618
British East Indies	977	17,144	1,415	19,276
Australia:				
Western	580	5,144	849	8,433
South Australia and Northern Territory	2,832	30,766	3,331	35,009
Victoria	9,407	85,820	13,410	113,345
New South Wales	7,019	70,993	5,296	58,909
Queensland	313	4,385	254	2,711
Tasmania	1,322	11,665	1,242	10,677
New Zealand	11,332	139,907	15,373	171,909
Other British possessions	6,802	74,788	13,529	143,678
Total to British possessions	50,452	546,584	70,576	727,963
Total printed paper hangings	83,827	1,057,537	128,439	1,521,809
OTHER PRINTED OR COATED PAPER (EXCEPT SENSITIZED PHOTOGRAPHIC PAPER).				
Germany	913	15,811	1,724	45,238
France	1,160	30,012	2,612	91,933
United States	2,503	29,929	1,666	39,102
Argentina	566	14,074	4,090	69,367
Other foreign countries	3,269	62,598	11,277	216,812
Total to foreign countries	8,411	152,424	21,369	462,452

Kinds of paper and countries.	1908		1912	
	Quantity.	Value.	Quantity.	Value.
OTHER PRINTED OR COATED PAPER (EXCEPT SENSITIZED PHOTOGRAPHIC PAPER)—continued.				
	Cwt.		*Cwt*	
Cape of Good Hope	545	$11,509	972	$24,221
British East Indies	1,442	36,990	4,069	81,232
Australia	1,261	20,396	2,167	50,783
New Zealand	725	10,590	761	20,089
Canada	838	10,984	1,661	22,512
Other British possessions	747	19,174	3,046	59,439
Total to British possessions	5,558	109,643	12,676	258,226
Total other printed or coated paper	13,969	262,067	34,045	720,678
PASTEBOARD, MILLBOARD, AND CARDBOARD.				
Germany	912	7,985	2,586	24,191
Belgium	3,575	7,975	7,043	21,476
France	1,207	13,407	1,237	13,105
Japan and Formosa	79	1,348	2,662	8,866
United States	4,396	37,875	1,815	15,144
Argentina	1,395	10,142	2,209	11,558
Other foreign countries	9,387	48,616	10,366	56,577
Total to foreign countries	20,951	127,348	27,918	150,917
Cape of Good Hope	4,209	25,252	5,028	26,819
Natal	2,604	14,011	10,467	31,223
Transvaal	2,428	16,006	2,595	11,694
British India	13,256	64,052	12,247	55,108
Australia	21,531	89,145	39,919	162,507
New Zealand	5,103	28,483	5,548	29,399
Canada	2,694	15,275	3,865	19,704
Other British possessions	2,330	13,028	2,704	14,089
Total to British possessions	54,155	265,251	82,373	350,543
Total pasteboard, millboard, and cardboard	75,106	392,599	110,291	501,460

The reexports of paper from the United Kingdom during the years 1908 and 1912 were as follows:

Kinds of paper and countries.	1908		1912	
	Quantity.	Value.	Quantity.	Value.
PRINTING OR WRITING PAPER.				
On reels.				
	Cwt.		*Cwt.*	
Total to foreign countries	3,517	$11,475	Nil.	Nil.
British India	3,908	10,044	12,979	$39,146
Other British possessions	600	1,460	Nil.	Nil.
Total on reels	8,025	22,979	12,979	39,146
Not on reels.				
Germany	1,819	28,104	3,168	55,141
France	578	6,424	275	3,562
Turkey	5,113	15,461	1,365	4,832
Egypt	1,916	7,669	19	292
China (other than British)	5,768	20,001	19,802	60,919
Japan and Formosa	1,095	4,429	9,745	29,656
United States	8,428	43,414	607	8,998
Other foreign countries	4,410	39,200	1,983	25,067
Total to foreign countries	29,127	164,702	36,964	188,467

Kinds of paper and countries.	1908		1912	
	Quantity.	Value.	Quantity.	Value.
PRINTING OR WRITING PAPER—continued.				
Not on reels—Continued.				
	Cwt.		*Cwt.*	
Union of South Africa	2,044	$19,188	888	$5,255
British India	5,802	33,097	8,664	28,250
Hongkong	39	292	1,680	5,572
Australia	1,750	32,255	515	3,363
New Zealand	2,607	26,955	161	1,037
Canada	885	10,896	339	3,110
Other British possessions	1,321	9,743	3,441	10,132
Total to British possessions	14,448	132,426	15,688	56,719
Total not on reels	43,575	297,128	52,652	245,186
PRINTED PAPER HANGINGS.				
Total to foreign countries	518	11,748	585	21,636
Total to British possessions	881	7,693	217	2,535
Total printed paper hangings	1,399	19,441	802	24,171
OTHER PRINTED OR COATED PAPERS (EXCEPT SENSITIZED PHOTOGRAPHIC PAPER).				
Germany	490	14,235	97	2,234
France	267	16,283	24	1,285
United States	990	27,232	110	2,243
Other foreign countries	2,144	38,683	200	6,584
British possessions	1,256	32,333	612	20,649
Total other printed or coated papers	5,147	128,766	1,043	32,995
PACKING AND WRAPPING PAPERS.				
Belgium	685	2,930	149	681
Turkey	1,345	3,952	2,438	7,465
Egypt	1,356	4,102	1,313	8,927
United States	17,417	58,890	2,260	7,461
Other foreign countries	4,430	16,896	4,690	18,434
Total to foreign countries	25,233	86,770	10,850	37,968
Union of South Africa	4,068	18,297	5,075	23,646
British India:				
Bombay and Karachi	3,212	9,748	14,951	44,849
Other possessions	472	1,654	836	3,119
Australia	2,857	10,901	907	3,275
Canada	410	1,596	23,689	67,581
British West India Islands	2,240	6,360	2,838	8,934
British Guiana	3,191	6,053	2,197	3,898
Other British possessions	1,970	6,472	9,541	32,829
Total British possessions	18,420	61,081	60,034	188,131
Total packing and wrapping papers	43,653	147,851	70,884	226,099
STRAWBOARD.				
China (other than British)	1,515	1,923	10,952	17,008
Other foreign countries	5,603	8,964	1,415	2,866
Union of South Africa	7,021	15,893	5,728	13,514
British India	12,996	31,092	858	1,703
Australia	10,515	15,636	363	1,796
New Zealand	1,441	2,608	696	1,187
Other British possessions	3,684	6,847	445	818
Total strawboard	42,775	82,972	20,457	38,892
MILLBOARD AND WOOD PULP.				
Total to foreign countries	1,089	15,314	723	6,793
Total to British possessions	2,360	10,716	1,308	10,468
Total millboard and wood pulp	3,449	26,030	2,031	17,261

Preliminary statistics compiled by the Board of Trade show that the exports and reexports of paper from the United Kingdom during the year 1913 were as follows:

Kinds of paper and countries.	Quantity.	Value.
EXPORTS.		
Writing paper:	*Cwt.*	
France	5,229	$105,549
United States	2,171	43,025
Other foreign countries	41,198	565,132
British South Africa	18,305	176,406
British India	27,778	288,413
Straits Settlements	5,440	58,992
Ceylon	3,385	33,136
Australia	77,457	664,744
New Zealand	23,002	188,888
Canada	6,731	75,138
Other British possessions	8,789	103,325
Total	219,485	2,302,748
Printing paper:		
France	122,183	746,409
United States	31,207	217,343
Other foreign countries	426,232	2,294,564
British South Africa	106,992	555,891
British India	274,881	1,267,518
Straits Settlements	23,060	110,070
Ceylon	27,103	125,803
Australia	588,344	2,172,128
New Zealand	128,072	496,008
EXPORTS—continued.		
Printing paper—Continued.	*Cwt.*	
Canada	121,649	$733,688
Other British possessions	34,702	163,300
Total	1,878,415	8,872,722
Packing and wrapping paper	904,975	1,844,365
Printed paper hangings	127,770	1,511,754
Other printed or coated papers, other than sensitized	27,886	623,501
Pasteboard, millboard, and cardboard	126,787	573,692
REEXPORTS.		
Printing and writing paper:		
On reels	106,859	254,971
Not on reels	111,688	400,663
Printed paper hangings	790	27,125
Other printed or coated papers, except sensitized	1,156	42,884
Packing or wrapping paper	75,289	267,400
Strawboard	12,803	30,250
Millboard and wood-pulp board	4,254	20,955

IMPORT TRADE.

The imports of paper into the United Kingdom, and the principal countries of origin, during the years 1908 and 1912 were as follows:

Kinds of paper and countries.	1908		1912	
	Quantity.	Value.	Quantity.	Value.
PRINTING OR WRITING PAPER.				
On reels.	*Cwt.*		*Cwt.*	
Russia	448	$1,324	58,834	$184,688
Sweden	549,000	1,526,732	576,937	1,633,051
Norway	549,363	1,503,525	897,757	2,350,393
Germany	159,596	457,704	113,417	378,959
Netherlands	21,862	68,506	60,871	154,560
Belgium	15,246	56,796	5,515	22,970
France	1,198	19,383	1,416	15,300
Austria-Hungary	4,985	17,611	15,552	43,107
United States	72,724	211,006	52,688	135,220
Other foreign countries	1,681	5,567	8,358	21,106
British possessions	217,179	537,597	865,808	2,118,256
Total on reels	1,593,282	4,405,751	2,657,153	7,057,610
Not on reels.				
Russia	7,816	15,996	8,246	21,719
Sweden	283,190	884,486	148,871	467,106
Norway	549,986	1,507,490	273,647	856,898
Denmark	2,824	12,419	650	1,669
Germany	475,038	2,176,522	264,382	1,232,801
Netherlands	70,827	316,935	35.712	170,892
Belgium	172,100	765,865	104,624	471,793
France	37,471	657,532	11,227	187,258
Italy	3,590	36,094	2,442	30,357
Austria-Hungary	10,103	42,947	8,458	23,101

Kinds of paper and countries.	1908		1912	
	Quantity.	Value.	Quantity.	Value.
PRINTING OR WRITING PAPER—continued.				
Not on reels—Continued.	*Cwt.*		*Cwt.*	
Japan and Formosa	4,115	$124,781	3,355	$98,882
United States	52,864	372,988	62,491	498,996
Other foreign countries	5,888	30,357	401	3,893
Canada	126,275	323,595	1,873	5,314
Other British possessions	17	316	....	....
Total not on reels	1,802,104	7,268,423	926,379	4,070,669
PRINTED PAPER HANGINGS.				
Germany	42,142	407,793	44,230	416,582
Netherlands	1,584	14,789	239	2,871
Belgium	20,321	256,134	14,002	170,449
France	2,601	76,968	1,922	46,275
Switzerland	239	6,890	298	10,010
United States	1,715	42,338	1,591	37,481
Other foreign countries	2,736	38,844	1,341	22,559
British possessions	286	2,132	1	29
Total	71,624	845,888	63,624	706,256
OTHER PRINTED OR COATED PAPERS (EXCEPT SENSITIZED PHOTOGRAPHIC PAPER).				
Germany	66,795	802,637	64,190	743,363
Netherlands	9,828	154,224	3,340	32,878
Belgium	42,326	365,469	31,239	293,898
France	11,100	240,687	5,072	124,903
Switzerland	468	13,169	267	4,648
United States	18,370	374,555	5,034	104,245
Other foreign countries	2,925	66,520	1,043	21,860
British possessions	571	9,552	157	7,878
Total	152,383	2,026,813	110,342	1,333,673
PACKING AND WRAPPING PAPER.				
Russia	269,217	796,631	291,631	732,374
Sweden	727,834	2,349,765	1,240,066	3,900,709
Norway	726,594	2,171,033	890,482	2,683,869
Germany	331,154	1,317,031	808,384	3,227,783
Netherlands	51,960	192,723	163,061	657,532
Belgium	210,943	835,242	279,185	1,099,946
France	11,882	68,477	20,891	135,809
Austria	43,173	133,770	9,068	32,352
United States	22,749	95,149	9,030	50,344
Other foreign countries	15,717	57,069	12,450	61,031
British possessions	295	565	928	3,153
Total	2,411,518	8,017,455	3,725,176	12,584,902
STRAWBOARD.				
Germany	30,900	63,936	32,888	57,122
Netherlands	2,292,323	3,069,370	3,226,562	4,272,957
Belgium	18,749	14,857	18,903	28,220
United States	1,645	5,567	653	1,679
Other foreign countries	3,961	12,458	1,656	2,638
British possessions	2,631	5,805	4,349	8,759
Total	2,350,209	3,171,993	3,285,011	4,371,375
MILLBOARD AND WOOD-PULP BOARD.				
Russia	346,006	663,864	406,615	771,481
Sweden	261,239	599,742	337,642	824,608
Norway	52,210	120,903	59,160	135,541
Germany	73,240	277,809	148,483	460,225
Netherlands	154,421	368,335	80,352	158,507
France	4,311	39,550	4,461	36,304
Austria	9,424	21,612	17,840	39,234
United States	32,857	110,051	34,113	161,923
Other foreign countries	5,933	24,123	7,208	36,148
Canada	120,036	252,109	213,982	459,787
Other British possessions	....	....	826	1,830
Total	1,059,677	2,479,098	1,312,682	3,085,588

Preliminary figures issued by the Board of Trade show that the imports of paper into the United Kingdom during the year 1913 were as follows:

Kinds of paper and countries.	Quantity.	Value.
Printing or writing paper:		
On reels—	*Cwt.*	
Sweden	447,212	$1,254,768
Norway	883,102	2,415,799
Germany	172,806	625,988
United States	41,418	104,936
Newfoundland	860,123	2,083,183
Other countries	224,208	652,101
Total on reels	2,628,869	7,136,765
Not on reels—		
Sweden	141,615	455,840
Norway	348,558	1,064,897
Germany	301,744	1,394,286
Belgium	96,918	445,479
United States	45,015	394,643
Other countries	68,343	514,831
Total not on reels	1,002,193	4,269,976
Printed hangings:		
Germany	38,210	388,930
Belgium	14,853	180,119
Other countries	4,241	84,209
Total	57,304	653,258
Other printed or coated paper:	*Cwt.*	
Germany	53,440	$682,040
Belgium	34,568	355,259
France	3,662	98,654
United States	8,232	136,507
Other countries	3,046	54,339
Total	102,948	1,326,799
Packing and wrapping paper:		
Russia	262,799	642,061
Sweden	1,366,886	4,263,638
Norway	1,058,624	3,140,186
Germany	892,589	3,627,440
Belgium	280,782	1,118,793
Other countries	228,720	1,016,364
Total	4,090,400	13,808,482
Strawboard	3,530,422	4,760,936
Millboard and wood-pulp board	1,319,019	3,240,743

COMMENTS UPON IMPORTATIONS.

Upon examination of the foregoing statistics it appears that there were notable increases in the imports of paper on reels from Russia (Finland), Norway, Netherlands, Austria-Hungary, and the British possessions (particularly Newfoundland), while there were decreases in the imports from Germany, Belgium, and the United States. The increases of shipments from Russia and Norway and Newfoundland are accounted for by the accessibility of wood used for the manufacture of pulp from which paper on reels is chiefly made. The product of the Netherlands is made chiefly from straw, is of a thin quality, and appeals to a special trade in this country. Austria-Hungary has likewise specialized in particular grades. The falling off in the shipments from Germany and Belgium is accounted for (1) by the fact that the demand on the Continent is sufficient to consume the output of the German mills, and (2) that the English mills are better able now to compete with the cheaper grades which were formerly received from Belgium. It is explained that paper made in the United States can not compete favorably with the products of British mills on account of the cost of transportation.

There has been a general decrease in the imports of paper not on reels due to the fact of the increase of British production, though there have been special increases in the quantities received from Russia (Finland) and from the United States, the classes of paper coming from the United States being confined more particularly to typewriting, high-grade printings, and carbons.

Increases have occurred in the receipts of packing and wrapping papers from Sweden, Germany, and the Netherlands, due to the specialization of the mills of those countries in these classes of paper. Decreases are noted in shipments received from Austria-Hungary and from the United States.

Almost all of the strawboard used in the United Kingdom comes from the Netherlands, and in increasing quantities, due to the fact that special attention has been given in that country to the production of this class of paper and the encouragement given by the Government. On the other hand, a decrease is specially to be noticed in the importation of millboard and wood-pulp board from the Netherlands, with corresponding increases from Germany, an important class of board being produced in the latter country, which has gradually displaced the product of the Netherlands.

There appear to be no special controlling factors influencing the trend of importations other than prices, which are of course determined partially by the location of the countries of production, the availability of paper-making materials in such countries, and the encouragement received from their Governments. For example, paper can be shipped from Scandinavia to Hull or even to London more cheaply than from an interior city of England to either of the others named, ocean rates being less than railway rates. German producers are stated to have the advantage of subsidized freights, and the Swedes also receive aid from their Government, frequently specifying that shipments of paper be carried in Swedish bottoms.

There are no duties levied upon paper of any kind imported into the United Kingdom.

TRADE CUSTOMS.

Printing paper, whether on reels or not on reels, is always quoted at so much per pound and wrapping paper at so much per ton regardless of class or quality of paper. The terms are usually one month, the discount varying from 5 per cent on writings and other papers up to as much as 15 to 25 per cent on news. The month in the paper trade is from the 20th to the 20th, settlement being expected during the succeeding calendar month, though frequently it is made in from one to six months, according to the convenience and responsibility of the buyer. Continental mills sometimes offer an extra discount for cash of 1½ per cent. Prices of foreign paper seldom change—the market variations appearing in the discounts. This is especially true of news.

The paper-trade customs of the United Kingdom have been codified by the Paper Makers' Association of Great Britain and Ireland and the Association of Wholesale Stationers, and such code is recognized as controlling in the absence of agreement to the contrary made at the time of the order between the vendor and the purchaser. (For trade customs see the report from Cardiff.)

PAPER TRADE OF LONDON.

The character and source of the paper used in London do not differ from those common to the United Kingdom, and for information as to those most popular reference should be made to the general report and to the table of imports given below, the greater proportion of which are consumed in London. There are no special requirements as to quality, weight, and finish peculiar to London except that the paper in general use for social and commercial correspondence is of a very good grade.

There are some 59 paper-making mills in the district, 7 of which produce millboards. These mills are equipped with 129 machines and 81 vats. It has been almost impossible to secure any dependable estimate of the output of the mills of the district, though it is reckoned that those in Kent produce annually about 5,270 tons of white paper (printing, news, and writing), those in Hertfordshire about 250 tons of similar grades, and those in Oxfordshire about 100 tons of whites and browns. It is estimated that the total production of combination box boards and cardboard is about 35,000 tons per annum, a large part of which is made within the London consular district.

The amounts and values of the paper exports (unenumerated) from the London district during the years 1908 to 1912, inclusive, were as follows:

Years.	Quantity.	Value.
	Cwt.	
1908	818,372	$5,609,337
1909	939,164	6,040,226
1910	1,297,729	7,062,293
1911	1,400,077	7,481,216
1912	1,369,709	7,300,227

It is to be noted that no printing or writing paper on reels were imported from Newfoundland prior to 1910. In that year, due to the purchase there of large tracts of timber and the building of mills by large interests in London, the quantity received amounted to 290,545 hundredweight, valued at $706,192, which increased to 621,675 hundredweight, valued at $1,511,481, in 1913. Conversely, it may be noted that the supply of the same class of paper from Sweden decreased from 266,173 hundredweight in 1909 to 119,247 hundredweight in 1913. The total quantity of paper on reels imported into London from all sources has increased from 753,057 hundredweight in 1909 to 1,368,702 hundredweight in 1913. On the other hand, the total amount of paper not on reels imported into London decreased from 987,420 hundredweight in 1909 to 471,010 hundredweight in 1913. The principal decreases occurred in imports from Germany and Norway, though declines are also to be noticed in the quantities received from Canada and the United States.

Imports of packing and wrapping papers show a striking increase, the quantity received in 1913 being 1,852,821 hundredweight, as against 862,751 hundredweight in 1909. The chief sources from which these papers were received were Germany, Netherlands, Sweden, and Norway.

The following table gives the quantity and value of paper imported into London for the years 1911, 1912, and 1913:

	1911		1912		1913	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
PAPER FOR PRINTING OR WRITING.						
On reels.	*Cwt.*		*Cwt.*		*Cwt.*	
Germany	116,737	$302,115	42,831	$133,332	89,757	$337,472
Netherlands	79,264	185,740	47,562	114,868	25,803	61,021
Belgium	278	1,489	909	3,158	1,652	5,445
France	6	146	281	2,784	33	185
Russia	1,766	4,404	....	....	10,547	24,979
Sweden	186,426	486,104	207,942	519,577	119,247	290,213
Norway	438,397	1,052,872	477,157	1,163,317	457,824	1,162,037
Denmark	....	....	1,043	2,190	....	....
Spain	....	....	340	1,596	712	2,504
Italy	....	....	....	....	157	1,411
Austria-Hungary	6,864	18,570	14,109	36,343	35,469	83,411
Canada	32,333	79,426	20,045	47,268	5,055	12,361
Newfoundland	415,253	1,001,706	572,153	1,397,838	621,675	1,511,481
United States	10,894	27,086	2,451	6,233	771	3,864
Total	1,288,218	3,159,658	1,386,823	3,428,504	1,368,702	3,496,474
Not on reels.						
Germany	148,131	509,420	122,923	449,606	144,634	520,419
Netherlands	12,663	42,285	4,705	16,346	3,965	13,242
Belgium	77,170	413,069	75,682	335,409	71,147	315,729
France	3,162	38,289	2,610	43,706	4,013	31,545
Switzerland	93	793	96	1,017	111	1,343
Russia	4,732	13,305	88	346	....	....
Sweden	55,091	166,663	30,919	93,548	10,935	31,477
Norway	113,102	345,254	140,201	449,835	193,196	575,722
Denmark	826	2,473	635	1,533	4	15
Spain	531	1,888	118	370	884	3,139
Italy	1,924	23,320	1,776	23,408	2,010	23,851
Austria-Hungary	3,109	16,190	8,033	18,848	7,918	33,715
China	13	175	49	647	11	185
Japan	3,604	117,190	3,314	98,298	3,657	116,898
Canada	835	1,913	1,287	3,168	416	1,436
United States	36,755	299,304	41,188	368,549	28,109	287,843
Total	461,741	1,991,531	433,624	1,904,634	471,010	1,956,559
PRINTED PAPER HANGINGS.						
Germany	29,110	233,042	25,764	219,600	20,596	187,720
Netherlands	1,556	12,166	32	370	221	2,424
Belgium	9,639	122,956	13,487	165,836	13,406	167,052
France	46	1,002	186	3,051	120	1,976
Switzerland	....	....	16	102	15	156
Sweden	25	209	....	....	....	....
Russia	147	730	137	769	148	1,012
Austria-Hungary	339	3,192	7	44	....	....
Denmark	....	....	....	....	16	175
China	7	652	....	....	....	....
Japan	559	18,633	480	15,217	305	9,635
Canada	....	....	1	29	2	44
United States	288	5,811	311	8,867	391	5,723
Total	41,716	398,393	40,421	413,885	35,220	375,917
OTHER PRINTED OR COATED PAPER.						
Germany	22,209	367,941	19,145	320,989	19,891	344,368
Netherlands	1,373	24,099	293	4,847	197	3,129
Belgium	684	19,203	838	23,831	2,259	48,324
France	418	8,171	546	13,388	627	14,536
Switzerland	156	3,806	50	1,343	97	2,239
Russia	18	667	1	39	7	88
Sweden	12	380	10	234	22	492
Norway	1	29	....	15	....	....
Denmark	81	1,061	22	419	1	49
Spain	31	701	....	....	....	....
Italy	482	14,731	163	5,163	50	1,387
Austria-Hungary	87	2,258	42	1,314	91	1,976
Queensland	4	170	....	....	....	....

	1911		1912		1913	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
OTHER PRINTED OR COATED PAPER—continued.						
	Cwt.		*Cwt.*		*Cwt.*	
Japan	545	$13,962	463	$10,332	232	$5,426
New Zealand	7	375				
China	74	774	4	881	18	1,114
Victoria	11	448	4	24		
New South Wales	29	608	7	127	2	24
West Australia	18	185				
Canada	161	4,239	104	5,387	139	9,806
United States	2,863	74,121	2,132	49,901	4,037	77,986
Total	29,264	537,929	23,824	438,234	27,670	510,944
PACKING AND WRAPPING PAPER.						
Germany	337,319	1,231,108	443,810	1,672,431	549,933	2,061,280
Netherlands	151,194	570,008	118,923	474,561	117,284	458,098
Belgium	87,513	314,210	82,959	290,943	95,537	330,094
France	15,116	83,786	10,701	64,602	14,348	77,294
Switzerland	4	19	8	68	34	190
Russia	132,071	389,266	118,215	321,125	102,136	269,900
Sweden	430,967	1,356,342	570,304	1,807,554	612,255	1,886,581
Norway	243,466	801,298	292,183	985,787	341,118	1,088,528
Denmark	6,577	22,113	4,953	17,154	2,127	7,854
Spain					662	2,550
Italy	1,055	4,443	1,886	7,100	1,961	9,139
Turkey, Asiatic			20	112		
Austria-Hungary	14,773	42,898	8,112	27,593	7,486	37,039
Egypt	33	88				
Japan	14	321	144	2,209	7	107
China	1	19				
Canada	257	594	276	798	492	1,397
Greece	95	268				
United States	2,597	21,831	2,745	20,430	7,441	70,555
Total	1,423,052	4,838,612	1,655,239	5,692,467	1,852,821	6,300,556
STRAWBOARD.						
Germany	18,156	31,486	19,032	30,805	42,975	74,024
Netherlands	1,487,198	1,845,157	1,590,009	2,002,014	1,551,199	2,062,724
Belgium	14,309	19,593	11,158	15,072	9,092	12,595
France			511	642	309	521
Austria-Hungary	1,636	3,134				
Russia	524	618	398	774	1,389	2,516
Norway			257	487		
Sweden	573	1,114	60	88	658	1,299
United States	1,620	3,635	442	1,071		
Canada	5,391	12,035	870	1,460	3,145	4,399
Total	1,529,407	1,916,772	1,622,737	2,052,413	1,608,767	2,158,078
MILLBOARD AND WOOD PULP BOARD.						
Germany	62,995	196,042	69,804	201,089	83,468	252,936
Netherlands	16,676	29,301	36,639	53,108	8,972	14,891
Belgium	789	14,283	1,042	10,633	121	2,141
France	1,549	8,511	2,560	13,704	1,758	10,122
Switzerland					7	117
Russia	186,406	362,389	210,939	400,182	213,976	415,010
Sweden	128,153	274,106	143,558	310,472	146,362	324,508
Norway	27,650	57,371	24,214	48,821	22,754	45,375
Denmark	511	1,071	271	565		
Austria-Hungary	11,825	24,582	12,807	27,782	14,734	31,550
Canada	77,403	165,373	85,618	192,874	84 272	192,796
Newfoundland	43	92				
United States	19,735	84,180	19,811	105,087	16,648	87,602
Total	533,735	1,217,301	607,263	1,364,317	593,072	1,377,048
BOXES AND CARTONS OF PAPER OR CARDBOARD.						
Germany	1,170	22,950	1,882	23,588	1,410	10,565
Netherlands					232	895
Belgium	282	4,472	198	3,275	107	2,093
Canada	70	720				
France	59	1,183	27	779	180	3,523
Japan	4	73				

	1911		1912		1913	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
BOXES AND CARTONS OF PAPER OR CARDBOARD—continued.	*Cwt.*		*Cwt.*		*Cwt.*	
Switzerland	2	$29	11	$78	11	$248
Sweden	3	29	4	54		
Austria-Hungary	5	165	12	409	10	195
Italy			8	78		
United States	229	1,893	400	3,557	445	4,137
Total	1,824	31,514	2,542	31,818	2,395	21,656
UNENUMERATED PAPER AND ARTICLES OF PAPER.						
Germany	17,364	279,848	24,666	429,332	24,355	312,137
Netherlands	1,233	8,765	179	2,292	550	3,660
Belgium	389	6,000	502	12,429	1,115	6,935
France	17,559	253,700	16,700	201,648	22,840	393,637
Switzerland	47	462	26	311		
Russia	35	482	12	404	16	219
Sweden	3,600	20,031	7,149	32,669	10,464	51,726
Norway	37	136	886	2,462	1,623	6,161
Denmark	2	29			4	292
Spain	68	1,455	4	141	57	414
Austria-Hungary	373	5,718	84	2,745	197	4,677
Italy			1	19		
Egypt	46	1,630	22	730	23	535
Turkey, Asiatic			1	88		
China	790	5,805	436	3,241	1,245	8,608
Japan	2,069	34,683	1,291	24,702	4,082	57,449
Hongkong					5	565
New South Wales			27	638	10	380
New Zealand			16	389		
Canada			69	482	189	706
Victoria	367	1,324				
United States	12,109	113,345	10,811	92,901	11,468	127,259
Total	56,088	733,413	62,882	807,623	78,243	975,360
Grand total	5,365,045	14,825,123	5,834,815	16,133,895	6,037,900	17,172,592

BELFAST.

From Consul Hunter Sharp.

The principal papers made in this consular district and their prices to wholesale dealers are as follows: Book papers, No. 1, 2d. (4 cents) per pound; No. 2, 1⅞d. (3¾ cents) per pound; No. 3, 1¾d. (3½ cents) per pound. Wrapping paper, No. 1, 16s. 6d. ($4.01) per hundredweight (112 pounds); No. 2, 15s. 6d. ($3.77) per hundredweight; No. 3, 14s. 6d. ($3.53) per hundredweight. Imitation manila and imitation kraft papers, prices same as for wrapping paper. Duplex and triplex board (like Bristol board) used for playing cards, calling cards, and similar purposes, white, tinted, and colored, £18 ($87.60) per ton (2,240 pounds). Writing papers of a cheap grade, cream laid, £18 10s. ($90.03) per ton; cream woven, £18 10s. ($90.03) to £20 ($97.33) per ton; watermarked, £23 ($111.93) per ton. The above prices are quoted c. i. f. English ports and would be subject to an average discount of 10 per cent for local delivery.

The average prices of imported papers are: Writing papers, 3d. to 1s. (6 to 24 cents) per pound; book papers, 3d. to 1s. (6 to 24 cents) per pound; printing paper, 1½d. to 6d. (3 to 12 cents) per pound; wrapping paper, 2d. (4 cents) per pound; imitation manila, 2d. per pound; tissue, 3d. (6 cents) per pound; blotting paper, 6d. (12 cents) per pound; cover paper, 3d. to 6d. per pound; cloth lined royal, £1 ($4.87) per gross; parchment, double crown, 2s. ($0.486) each; carbon paper, demy, high grade, 60s. ($14.60); strawboard, for boxes, ¾d. (1½ cents) per pound; Bristol board, 3d. per pound; pressing paper, 6d. per pound; flint paper, 20 by 30 inches, 7s. to 10s. ($1.70 to $2.43) per ream; newspaper, 1d. to 1¼d. (2 to 2½ cents) per pound.

There are no statistics available giving the imports and exports of paper by classes and by countries, or the value thereof. According to the report of the Belfast Harbor Commissioners, the imports and exports of paper, in tons of 2,240 pounds, for the calendar years 1912 and 1913 were as follows:

Classification.	Imports.		Exports.	
	1912	1913	1912	1913
	Tons.	*Tons.*	*Tons.*	*Tons.*
Foreign	3,616	3,714	72	48
Coastwise	13,111	13,042	11,033	10,006
Total	16,727	16,756	11,105	10,054

The report of the Department of Agriculture and Technical Instruction for Ireland shows that in 1912, the last year for which statistics are available, there were imported into Belfast: Cardboard, 1,770 hundredweight; millboards, 36,992 hundredweight; strawboard, 47,946 hundredweight; and stationery, 22,176 hundredweight (1 hundredweight = 112 pounds). Of wood pulp there was imported into Belfast in 1912, 1,951 tons, and into Larne, within this consular district, about 9,000 tons.

MARKET REQUIREMENTS.

Local wholesale dealers procure their stocks almost entirely from British manufacturers or from agents of foreign makers in English or Scotch centers. The greater part of the papers are undoubtedly English made. Special instances, however, of papers manufactured in other countries may be mentioned. Scotch manufacturers have a very good reputation here for high-class writing papers, and the bulk of paper of this grade is imported from that country. Certain cheap papers are of German origin. In this class come plain and colored flint papers used by local box makers for covering strawboard boxes. German wrapping papers are also found here. American papers are confined principally to tinted writing papers, bonds, and high-grade cover papers for catalogues and similar work. Canada, United States, Germany, and England contribute newspaper, but the country last named at present furnishes the most. The total annual consumption of newspaper in Belfast is estimated at 4,000 tons. One of the largest consumers of newspapers in this district now uses three different kinds of paper, an American paper costing 1¼d. (2½ cents) per pound less 10 per cent, an English paper costing 1d. (2 cents) per pound net, and a German paper costing 1d. less 2½ per cent. The American paper is being shipped to this district under an old contract, and when this is completed it will be replaced by a contract for paper of German origin. American newspaper will then be practically out of this market. On the other hand, there are indications that tinted writing papers are gaining a little more popularity and this is slightly increasing the sale of this class of American papers here. In cover papers, American makers easily hold first place in the estimation of local dealers so far as quality is concerned.

For paper bags, local manufacturers use kraft, imitation manila, vellum, plain wrapping, and glazed wrapping papers. They are bought by the ream, in sheets, for handmade bags and in rolls for machine-made bags. A small quantity of Norwegian paper is used for this purpose.

British, German, American, and French wall papers are found in this market. The sale of American and French papers has declined in recent years, however, and English makes now largely predominate. In quantity sold, pattern papers lead, and these are the cheapest in price, ranging from 1½d. (2½ cents) per piece of 12 yards. Tinted cartridge papers, costing from 3d. to 3¼d. (6 to 6½ cents) per piece for a medium weight, are popular for plain papers, but they are yielding a little in favor to self-colored papers of a better grade, the price of which beginning at a minimum of 2¾d. (5½ cents) averages about 1s. (24 cents) per piece.

CREDIT TERMS.

Inasmuch as local dealers buy from British manufacturers or from agents of foreign makers in English or Scotch centers, the business is done on the usual English terms. Prices are generally quoted by the pound and a discount of 2½ per cent for cash in 30 days is usually allowed. The fact that only comparatively small quantities of certain lines of American paper could, in all probability, be sold here, taken in conjunction with the unwillingness of local dealers to import merchandise of this kind direct from foreign countries when a near-by source of supply is available, indicates that American makers would find it difficult to sell in this market except through a general agency or branch in some British center. This is emphasized by the fact that the cost of transportation from the United States limits this market for American makers to the more expensive grades of paper—the class in which the consumption is smallest. As even the largest local consumers buy these in comparatively small quantities, they require a near-by source of supply for replenishing stocks. Especially in the case of wall papers has this factor operated against American manufacturers.

BIRMINGHAM.

From Consul Albert Halstead.

Supplies of paper of all kinds for the Birmingham consular district are readily obtainable by users and at reasonable prices. Practically every kind of paper that is manufactured is marketable, and there is no prejudice against paper because it is of origin other than British. The market is large and paper is readily saleable if the usual practices as to terms and time of delivery are rigidly followed and the quality of the paper is absolutely up to the representations made at the time of its sale.

In connection with the introduction of American papers into the United Kingdom and particularly into this market, it is stated by a paper-selling expert that while there would be some advantages in putting on the British market papers of the same kind as those made in the United Kingdom or now imported into the Kingdom, the competition of these would be something of an obstacle. It is suggested, however, that it is better for the American paper makers to push their own particular lines and cultivate a market for them, and that with the use of proper selling agents such a market should be readily obtainable. This refers particularly to writing and printing papers of various grades.

An increasing market is found for carbon papers, now that typewriters are so generally in use. The American carbon paper stands high, but British makers are materially improving their product and Germany is supplying the market quite readily.

Comparatively recently American-made envelopes appear to have been imported into this district in considerable quantities and it is expected that these imports will continue and probably increase. There is a disposition manifested to purchase supplies of paper of all kinds from the United States if market prices are favorable.

MARKET REQUIREMENTS.

Standard sizes of writing papers used in the Birmingham district are 16½ by 21 inches, called the small size; 18 by 23 inches, the next size; while the largest size, which is not very much in use, is 20 by 25 inches. These three sizes make it necessary for a wholesale paper dealer to carry a much larger stock than where one size—the 17 by 22 inches, which is the American standard—is carried. As it is quite the custom for firms with a number of departments to use various tints of paper to indicate the department from which the letter originates, and as in several cases firms employ as many as 16 different colors, the burden upon the paper dealer by reason of having to carry 16 different colors of three different sizes is heavy. At the same time, as he must purchase in ton lots, it frequently happens that where one color is in greater demand he must carry an excess stock of one color and then find himself short of others. For this reason the largest paper distributors in England, who have a number of branches throughout the Kingdom, including what is perhaps the most important branch in Birmingham, are pushing the American stock size of 17 by 22 inches. At first difficulties were found in this connection, but it is asserted that gradually the 17 by 22 inch size is making headway. The argument that it is more economical to cut up is having due weight, as is the annoyance that not infrequently comes through the necessity of having different sizes of envelopes for the different sizes of paper. It is suggested that, despite the sizes of paper in demand in England, after a while there should be comparatively little difficulty in popularizing the American single standard.

In printing paper, the basic sizes, where the paper is for book, magazine, and periodical and not for newspaper purposes, are 17½ by 22½ inches, called demy, and 20 by 30 inches, called double crown. Here again the 17 by 22 inch American size, though hard to sell, is thought not to offer an insurmountable difficulty to an increase in the market for American papers.

The paper in general use for social and commercial correspondence is generally of a medium grade. The average business house of standing will not expend as much on its stationery as a similar house would in the United States, though for firms who rely upon the appearance of their stationery to make a good impression on their correspondents, the higher classes of paper are becoming more popular. The British postal regulations permit 4 ounces to be carried for domestic mail and for mail to the colonies for 1d. (2 cents). Therefore, the paper used for business and personal correspondence is on the average heavier, and many regard the use of the thinner paper as in bad taste. Also, handmade paper is heavier. The paper used for business and private correspondence is usually of semirough finish and not glossed, very little glossed paper being seen. It is only in the very cheapest grades that any gloss is found. The paper most largely used for correspondence is the esparto paper, and papers of the American bond and linen types are not greatly in demand, but nevertheless a considerable market for that type is said to exist. The term "linen" is supposed to refer to paper with a linen finish rather than to paper that is actually linen, made from linen rags or waste. In fact, comparatively little actual linen paper is on the market, but the imitations are so good as to almost make it impossible for anyone but an expert to tell the difference between them.

Ledger paper is required for blank books, as the term is used in the United States, or for account books, as the term is in England. For such papers there is a good market.

Book papers command a ready sale, but the Bible and India papers are almost exclusively of British origin, the so-called India paper being said to have been originated by a firm near Oxford. Book papers are of all qualities, but it is surprising to note that on occasions books produced by the best printers are printed on a comparatively poor quality paper. For book purposes British paper is said to be preferred, but American paper meeting the requirements of quality and price should have no difficulty in finding a ready market.

News paper is now mostly British, Canadian, and Newfoundland. Little comes now from Scandinavia. It appears that the American news paper which years ago commanded a very good market is not now available, the price at which it is now sold being practically prohibitive.

Wrapping paper is not, as a rule, of as good quality as is generally used in the United States, and paper dealers comment on the fact that there is much more waste in wrapping paper in the United States, and especially in Canada, than in England. Persons using wrapping paper where it is not required for packing for export purposes economize so far as possible and employ paper of the lowest quality that will serve their purpose. Immense quantities of wrapping paper of all qualities are sold and a considerable proportion of the same is common brown or rough and unglazed. There is much glazed kraft paper used. All that of British origin is glazed on one side only. Much kraft paper is colored and this a yellowish brown and thin. There is very little manila or bogus manila paper used. For the smooth kraft paper there is a very big sale.

Wall paper, it is stated, is almost exclusively of British origin and made in London and Lancashire and Tamworth in this district by Fisher & Co. (Ltd.), of Kettlebrook Mills; Tamworth being within

15 miles of Birmingham. There appears to be a combine in the manufacture of wall paper which thus has a decided advantage in the market.

In tissue papers there is an immense import and an equally large market. Most of the imported paper comes from Scandinavia, but the better classes are made in Lancashire. There is no reason, however, but that American tissue paper should command favorable consideration in the market.

Blotting paper in general use in England is of British origin and, from the American standpoint, exceedingly thin. The average weight is 38 pounds to the ream, but some runs as low as 19 or 20 pounds. This is generally for insertion purposes. The thick blotting paper is not popular, but occasionally there are special orders for blotting paper weighing as much as 60 to 70 pounds to the ream.

Most of the cover paper is of British or German origin. For this type of paper there is an excellent market if the delivery is right. However, this paper is not ordered in very large quantities at a time, but as wanted and at short notice. Therefore, in view of the time required to secure such paper from the United States, it is suggested that the market conditions are not favorable. One difficulty is that it often happens that the imported paper can not be matched when an additional supply is required. This paper is almost always ordered specially and to meet an immediate requirement. However, one large paper-dealing firm buys cover paper from abroad when the price and quality suit it, and makes a market for the same. In this way it is probable that something could be done with cover paper of American origin.

There is no general use of cloth-lined paper except by the British Post Office, which is said to buy only that of British origin.

Of parchment paper there are two qualities, one made by the acid process and the other the mechanical process, through the heating and grinding of wood pulp. For engrossing purposes parchment paper is not used, as it is often used in the United States, but the actual parchment is substituted. For the poorer quality of parchment paper, all of which now seems to come from Great Britain and Scandinavia, the demand is enormous. This is used for purposes where in the United States greased paper would be used for wrapping various articles the moisture of which is likely to leak out, or to preserve others from dampness; that is, for grocery or confectionery purposes, as well as for packing articles that must be kept dry and when actual waterproof paper is not required. This parchment paper is bought at prices ranging from 1½d. to 3d. (3 to 6 cents) per pound by the importer.

For waxed paper there is a very good market. That on the market is generally made in England and Germany.

The box board used comes from England, Canada, United States, Scandinavia, and Germany. For pressboard the market is not so large, there being a comparatively small demand for this. Bristol board is used for portmanteaux, bags, and to line shoes. It comes chiefly from England and Scandinavia.

The raw materials available are rags and other waste, paper box board, spinners' waste, etc., as well as wood pulp, which is imported. Supplies are ample and some waste is exported to the United States, but the cost of carriage makes the import of such waste unprofitable, it is stated.

In Birmingham and district practically only brown and cheap papers are made, the total output being about 500 long tons per week. Of printing paper the output is about 150 long tons per week.

In the Birmingham district there are three paper mills. One makes news, machine-finished, and supercalendered papers, cover papers, cartridges, antiques, pasting, gumming, and enameling papers. Another makes browns, krafts, rope browns, tube papers, ticket and Jacquard middles, brown, white, or colored mill wrappers, colored shop papers, all kinds of hand and machine made bags, satchels, block and patent bottoms. This firm has four other mills. A third mill makes tube and Jacquard ticket middles, grocery papers, glazed and unglazed, and machine and hand made bags.

Ordinary labor in the mills is paid at the rate of 25s. ($6.07) per week, while paper makers are paid 50s. ($12.16). The equipment is all British. The impression exists that the British paper mill is superior to any in the world.

It is regretted that wholesale prices of local or imported products are not obtainable, information upon this point not having been furnished when requested, nor are statistics of paper exports available because none are kept. There have been no exports of paper through the Birmingham consulate.

It can be said that the English market is an excellent market for every grade of paper; that while the cheaper and medium grades are more generally used for correspondence than in the United States, there is a good market for the higher grades because a number of users like to be exclusive and seek something that it is difficult for others to copy. Therefore the highest class of papers should not be neglected so far as sale in the Birmingham market is concerned.

The usual terms for the sale of paper in the United Kingdom, in lines other than writing and book papers, are 5 per cent discount for two months' account. In writing papers and book papers the terms are generally 5 per cent discount for monthly account, but the large dealers in paper are generally ready and really anxious to pay prompt cash, provided an additional discount, such as three-fourths of 1 per cent or 1½ per cent, is obtainable. It appears it is not customary for large users of papers to buy direct from the mills.

BRADFORD.

From Consul Augustus E. Ingram.

The paper used in this district may, broadly speaking, be classified under two general headings, viz, wrapping paper and writing paper, with lesser quantities of other kinds. The staple industry of Bradford is that of wool and textile manufacturing, and in the various branches connected therewith considerable quantities of paper are required by wool-top makers, spinners, manufacturers, piece merchants, and others, in placing their goods ready for the market, and also for wrapping prior to incasement for shipment abroad. Bradford is not a paper-manufacturing center, and by far the major portion of the paper used is handled by agents and merchants who obtain their supplies from various parts of the United Kingdom, Germany, and Scandinavia.

It is not possible to procure any statistics giving the amount of the various kinds of paper most in demand locally.

American-made papers are being sold to a limited extent in the higher grades of printing, more particularly for pamphlet covers and special purposes. In other grades, as a rule, prices are stated to be rather too high (which also applies to news paper) to compete favorably with the papers made in this country.

As showing the import supply of wood pulp and reel paper into the United Kingdom the following recently appeared in a trade journal:

> Following up the analysis of the board of trade returns for August, in respect to the importation of paper and material for paper making, an examination of the returns for September, the first complete month of the war, it is of particular interest to all engaged in the work of news-paper production. Fortunately the September record of imports shows that there is no immediate prospect of a shortage of supplies either in regard to reel paper or wood pulp.
>
> Taking the raw material for paper making first, the returns show a very remarkable advance in the importation of wood pulp in September, indicating a busy time in the paper mills.
>
> The value of paper-making materials imported in September was £1,038,000 ($5,051,427), an increase of no less than £500,000 ($2,433,250), compared with the corresponding month of 1913, accounted for by the value of wood pulp alone, or a value due to quantity rather than to price.
>
> As regards quantities, the amount of wood-pulp imports for last month, compared with the corresponding month of 1913 and the first (partial) month of the war, are given as follows:

Wood pulp.	September, 1913.	August, 1914.	September, 1914.
	Tons.	*Tons.*	*Tons.*
Chemical:			
Dry, bleached	1,964	1,683	2,492
Dry, unbleached	33,741	16,782	79,082
Wet	921	980	1,530
Mechanical:			
Dry	498	....	768
Wet	62,133	32,575	87,362
Total	99,257	52,020	171,234

> The large increase in the imports of chemical pulp came from Sweden and Norway. Canada shared with Norway the increase in the mechanical product.
>
> As to price, the remarks of a correspondent in regard to variation of quality, in the Newspaper World should be borne in mind. We must be satisfied with averages in regard to the board of trade returns, but in the case of wood pulp averages are not a bad index of the movement in rates. Now, the average price of chemical pulp in September, 1913, was £8 3s. 6d. ($39.78) per ton. In September, 1914, with a very large increase in quantity the price rose to £8 17s. 9d. ($43.24) per ton. Mechanical pulp advanced in the same period from £2 5s. ($10.94) to £2 10s. ($12.16) per ton. These values, of course, represent only the cost, insurance, and freight as declared.
>
> The importation of reel paper in September also showed an increase, but not in so marked a manner as the raw material. Taking the same three months the importations from the several countries of supply were as follows:

Imports from—	September, 1913.	August, 1914.	September, 1914.
	Cwt.	*Cwt.*	*Cwt.*
Sweden	35,733	12,225	29,168
Norway	84,784	74,964	77,905
Germany	11,767	2,552	....
United States	4,380	4,446	33,065
Newfoundland	103,307	197,576	149,390
Other countries	21,262	11,394	35,671
Total	261,233	303,157	325,199

> The average price per hundredweight (c. i. f.) in the case of reel paper, which was 10s 8d. ($2.59) per hundredweight in September, 1913, fell to 10s. 3d. ($2.49) per hundredweight in September, 1914.

There is an increasing demand for toilet papers in this district, partially as the result of local laws requiring all buildings to be provided with water-closets. Owners of mills, warehouses, etc., have found it more economical as well as sanitary to supply toilet rolls for their employees, thus reducing plumbers' expenses in connection with stopped drain pipes, etc. Rolls are more commonly used than squares, the latter being generally confined to public conveniences to avoid waste. The prices range from 2½d. to 8d. (5 to 16 cents) per roll, those selling at 3½d. (7 cents) being mostly purchased, while for a superior paper 6d. (12 cents) per roll is paid; both qualities are made in this country.

The rolls are put up in cases containing 1 gross, the cases being free, and the wholesale price for those retailing at 3½d. (7 cents) is 30s. ($7.30), and for the 6d. (12 cents) rolls 34s. 6d. ($8.38) per gross.

BRISTOL.

From Vice Consul R. Castle.

There are two cheap qualities of paper made in Great Britain which are bought in reels for making bags, 25 by 28 inches, fruit size. These are supplied in eight or nine qualities and in all shades for fruit, but for bag making the shades are generally restricted to three colors, namely, blue, white, and pink. They are bought in England from 6s. ($1.46) to 7s. ($1.70) per hundredweight. These are made in Bristol and consignments are purchased at very low prices. They are made from pure sulphite pulp, and are entirely free from mechanical pulp, one firm in Bristol using quite 2,000 tons per annum.

Wholesale prices of paper constituents vary, according to the source of supply and where they are wanted, as follows: Wood pulp (sulphite pulp), £12 ($58.40) per ton; mechanical wood pulp, £4 5s. ($20.69); esparto grass, about £5 10s. ($26.76) per ton; rags vary from £3 ($14.60) to £17 ($82.73) per ton.

There is certainly a possibility of promoting trade with the United States, but the freight is an important item, viz, 21s. ($5.11) to Bristol, against 10s. ($2.43) from Amsterdam and Rotterdam and 17s. ($4.14) from Sweden. There are no customs duties. The shipping facilities are equally as good as the Continental, the only difference being in the distance from the mills. English dealers prefer to buy free house or c. i. f. terms; the United States dealers seem usually to require f. o. b. terms. Then, again, the makers in the United States require cash before they ship their goods. This is not customary with Continental shippers, who actually deliver here before payment is made. This gives an opportunity of seeing that the goods come in up to samples.

It is said that American manufacturers decline to accept the English dealer's check being sent direct and insist on this going through American banking houses. This apparently entails a certain amount of trouble, and is irritating to the British countinghouse management.

Generally speaking, American exporters are well represented in this country, but the trade results are not so encouraging as they might be. Different agents take up certain qualities of paper. The representatives are chiefly to be found in London, no agents being in Bristol.

CARDIFF.

From Consul Lorin A. Lathrop.

All kinds of paper ordinarily sold in a thriving industrial district of the Western States will be found on sale in South Wales. The exceptional feature is the absence of demand for high-grade, finely finished, or expensive papers. These are not used in our offices and are very little employed in correspondence. The bulk of the supply is of British manufacture, and comes by rail or occasionally by coast-steamer from England. The slight but developing shipments from Scandinavia are attracting attention. Some part of the paper used is of local make. A small quantity of poster and writing paper is of American origin, but not directly imported, nor is the American news print which is occasionally used by local newspapers.

All conditions, freight rates, volume of business, local customs, and preference, etc., tend to combine to prevent the establishment of direct trade. The conditions apply with special force to news paper. Newspapers can not be induced to import direct. They find it convenient to deal with a seller who is easily and promptly accessible, thus facilitating adjustments, damage claims, etc. There is also the important question of storage. A sudden demand for additional reels could be met in Cardiff within 24 hours from manufacturers or importers' stores in Bristol, Liverpool, or London. A newspaper importing direct would be compelled to warehouse, at considerable expense, a heavy reserve for its own protection.

The stationery stores of the district are small and numerous, and there would not be sufficient business in any one line to justify direct import. It follows that American business in the South Wales district must be developed from a central depot or agency in Liverpool, London, Bristol, or Birmingham. The intense competition of English manufacturers, and the expanding industry of Scandinavia, cut prices so severely that marked extension of American business in this district is hardly to be hoped for.

CUSTOMS OF THE TRADE.

The following are the agreed conditions under which sales are made in this district as well as throughout the United Kingdom. The terms of payment are a monthly account to run from the 20th of one month to the 19th of the next, payable during the succeeding month; thus goods invoiced from January 20 to February 19 should be payable during March. Discounts vary from 7½ per cent to 17½ per cent, according to the state of the trade, the size of the order, and the promptness of payment. Prices hereinafter quoted are for delivered goods, except in cases of small special orders when railway freight is a matter of arrangement.

In machine-made papers a ream, unless otherwise specified, contains 480 sheets. A "perfect" ream for printing papers contains 516 sheets. A ream of envelope paper contains 504 sheets; of news, 500 sheets. An "insides" ream contains 480 sheets all "insides"; that is, 20 good or inside quires of 24 sheets. A "mill" ream contains 480 sheets, and consists of 18 "good" or "insides" quires of 24 sheets each and 2 "outsides" quires of 24 sheets each. Reams are classified as "good," "retree," and "outsides." The price of "retree" is 10 per cent lower and of "outsides" 20 per cent lower than that of "good." For handmade papers a "mill" ream, "good," or "retree" contains 472 sheets and consists of 18 "insides" quires of 24 sheets each and 2 "outsides" of 20 sheets each. An "insides" ream, "good," or "retree" contains 480 sheets and consists of 20 "insides" quires of 24 sheets each. In all cases the "outsides" quires are placed one at the top and one at the bottom of the ream.

In printings, writings, etc., the average variation in substance of any ream must not exceed 4 per cent either above or below the ordered substance; in grays, caps, manilas, browns, colored printings, etc., 5 per cent. In news, printings, writings, etc., the average variation in substance of any reel must not exceed 5 per cent above or below the ordered substance. In the case of paper on reels claims for short lengths can only be made when the shortage exceeds 5 per cent, and then only for the amount of any excess over and above such 5 per cent, unless special arrangements to the contrary are made. In grays, caps, manilas, browns, colored printings, etc., the average variation in substance of any reel must not exceed 6 per cent above or below the ordered substance. For all papers of substance under 6 pounds demy (17½ by 22½ inches), and above 50 pounds demy, the actual weight may vary 8 per cent either over or under.

Payment for paper in reels, according to the printed or manufactured results, can not be claimed by the purchaser. The variation in measurement of paper in reams must not exceed one-half of 1 per cent either above or below the ordered measurement, but in no case shall the margin of variation exceed one-fourth inch or be less than one-eighth inch. The width of paper in reels must not vary more than one-half of 1 per cent. For makings of special weight, size, tint, watermark, etc., not having a regular sale in the market, the buyer is to take at full price any excess not exceeding 10 per cent above the quantity ordered, including a reasonable proportion of "retree." Where a maximum quantity is stipulated for when ordering, the order is considered duly executed if it amounts to not less than 90 per cent of the stipulated quantity. Unless otherwise expressly stipulated in the order, the maker is free as to what material he shall use. The weight of necessary wrappers and string for reams and reels is to be included in the chargeable weight of the paper.

LOCAL PRODUCTION.

The raw material for the local mills is almost entirely wood pulp imported from Norway. Such rags as are locally collected range from $7.29 for the lowest quality per ton to $111.92 for best new white linen cuttings; canvas rags, from $48.66 to $72.99 per ton; sound old canvas, from $97.33 to $145.99; old coir ropes, about $38.93; manila, about $46.22; hemp, $41.36.

The direct import of wood pulp in 1913 was 25,000 tons, and there was probably some additional quantity brought to other ports and sent here by rail or coasting steamer. Much of this pulp came from Norway for the supply of one local manufacturer. The declared values of this wood pulp work out at about $20 per ton, delivered.

There are three paper mills in this consular district, two of which are small producers. The largest mill turns out news paper principally, and printing papers, web or reams, machine-finished, and supercalendered, cream, azure, and antique laid note papers, cartridge paper, imitation parchments, bank papers, sulphite browns, blottings, glazed casings, etc. The company has eight machines, all of English manufacture, 56, 74, 79, 84, 90, 96, 106, and 128 inches wide.

There are no statistics as to exports, as foreign shipments are made by way of English ports and are recorded in the export statistics principally of Liverpool. There is no direct import trade, as importations reach the Cardiff district by rail from London, Liverpool, and Bristol.

DUNDEE.

From Consul E. Haldeman Dennison.

In the consular district of Dundee, Scotland, the trade in paper is a comparatively small one and is confined almost entirely to supplying local requirements. These consist mainly of the paper used by the publishers of the daily and weekly newspapers, with weekly popular magazines, and of the paper used for packing purposes by the retailers of food products, and by certain of the factories in putting up their manufactured linen goods.

The newspaper material, the largest item in the trade, is, with some slight exceptions, all of foreign manufacture and is obtained from Norway, Sweden, and Germany, and sometimes from Canada and the United States. It is not surprising that Scandinavia, with the abundant natural resources for the manufacture of wood pulp at its disposal and its proximity to Britain, has for many years been the chief source of supply for this market. There everything lies to hand and labor is cheap, so that it is possible to ship to this country at prices which home makers could not consider. Notwithstanding this, there have been indications that the home mills have been making a strong effort to meet this competition, and by means of new machinery and improved methods they have been so far successful that they have in recent years been getting a larger share of the newspaper trade than formerly.

All of the paper is made from wood pulp and is put up in reels of three standard widths of 17 inches, 34 inches, and 68 inches. At the present time the wholesale prices of this paper is 2½ cents per pound, which is considered to be a very low figure. The terms are 17½ per cent discount for cash in 30 days.

In the local trade the papers next in importance to the news paper qualities are those used for parceling and similar purposes. Formerly all of the brown paper used in this district was made in Scotland, but now Norway is the principal source of supply. The Norwegian makers have in recent years made great improvements in the manufacture of this class of goods and so are in a position to produce a paper which possesses all the advantages of lightness, strength, and price that have secured for it a firm hold on the local market.

The trade in writing papers is comparatively insignificant, and as a rule the paper in general use for commercial purposes does not, with the exception of a few of the higher class offices, exceed, if it comes up to, the medium grade of quality. For social use it is above the medium and in a good many cases is of high grade. In business houses the letter paper commonly in use is of British make; American-made papers, which are of better quality, being found too expensive for local wants.

The trade in wall papers, which is confined to supplying the local wants, is not by any means a large one, and it is estimated that to the extent of 85 per cent it is controlled by a British syndicate. There are one or two small concerns operating independently, which may, if they prove of sufficient importance, be ultimately taken over by the larger body. Papers of all qualities are to be had, ranging in price from 3 cents per piece, measuring 36 feet by 21 inches (the usual British size), to $6 and upward. France and Germany also contribute to the local market in the size of 27 feet by 18 inches, although the latter is now making specially for the British market in 36 feet by 21 inches. The business is very largely done through factors, Edinburgh and Glasgow being the chief centers as far as regards Scotland.

PRODUCTION OF LOCAL MILLS.

Raw materials for paper making are for the greater part imported and consist chiefly of esparto grass, fine rags, and wood pulp. These are the materials used in the two mills making the better quality of paper in this district. At the only other paper mill in this district are made the papers for bag-making purposes, in which flax-mill wastes, old bagging, and wood pulp are the material used. The price for each of these kinds of paper stock is as follows: Esparto grass, $48.66 per ton; fine linen rags, $82.73 to $121.66 per ton; wood pulp, $19.47 to $38.93 per ton; flax-mill waste, $24.33 to $58.40 per ton; old bagging, $19.47 to $24.33 per ton; all delivered Dundee net cash.

With regard to the rates of wages paid to the workers, there is no uniform standard in operation in the district. As a result, however, of a dispute that took place last year between the employers and the employed at the Invergowrie Mill, the workers who had, up until that time, not been organized, associated themselves with an existing trade-union, that took the matter up on their behalf and procured for them certain concessions by which the wages were advanced. Under the agreement made with the employers the following rates were fixed: Women counters, $4.86; women overhaulers, $4.01; firemen, $6.80; machinemen, $8.51 (also paid tonnage in addition, bringing their wages up to $12.16 to $14.60); assistant machinemen, $6.33 to $6.80 (with no tonnage); grass boilers, $6.07 to $6.43; cutter men, $6.43 to $6.91; press pâte men, $6.44; laborers, $5.10 to $5.46.

These wages are considerably in excess of those paid by other mills in the neighborhood to their workers, who are not organized, and represent, all over, a higher rate by about 73 cents per week. For equipment, the mills have the resources of engineering firms of large experience in the city and country generally to select from.

The import trade of the district is almost entirely carried on through agencies of the foreign houses, established in either Edinburgh or Glasgow. These are represented in some cases by local subagents, but there is no doubt that the market is very keenly competed for by many traveling salesmen of the parent agencies or resident representatives. In all cases the terms are for delivery in Dundee and usually for a discount of 5 per cent for cash in 30 days, in the case of the papers principally imported, excepting the newspaper class.

The quantity and value of all kinds of paper (including articles made from paper after 1910) and paper-making materials imported into Dundee during specified years are as follows:

Years.	Quantity.	Value.
PAPER, ETC.		
1908 .....cwt..	57,860	$183,871
1909 .....do....	65,157	185,482
1910 .....do....	63,337	186,528
1911 .....do....	69,792	204,563
1912 .....do....	57,745	172,610
PAPER-MAKING MATERIALS.		
1908 .....tons..	19,252	389,627
1909 .....do....	19,828	422,106
1910 .....do....	16,301	309,013
1911 .....do....	18,652	361,347
1912 .....do....	20,851	408,163

DUNFERMLINE.

From Consul H. D. Van Sant.

The supply of paper in the Dunfermline consular district is largely produced from four local paper mills.

The center of the paper-making industry in the district is Markinch, where one of the largest mills in Scotland is situated.

The manufacturing plants sell largely to London and other important cities. The market for the American product has been almost entirely established through the same centers of trade used by the Markinch manufacturers, and it could be increased in the same way, prices and quality being equal. Edinburgh or London might be considered the best headquarters for American stationery and paper sales for this part of Scotland.

The principal papers manufactured in the district are writing paper, fine printings, imitation art paper, cartridge or drawing paper, brown wrapping paper, and a various selection of blotting or colored paper, mostly of a high-class quality. Writing paper, including bond, ledger, and linen paper, is used; news paper from Aberdeen, Norway, and Sweden; brown and colored wrapping paper, some of it said to be bogus manila; and wall paper. The paper in use seems to be mostly of a medium grade, though both high and low grade paper is usually found on sale in some of the shops of the city.

There is little, if any, home raw material available for paper manufacture in the district, and rags and other waste is made use of, along with esparto grass from Spain and Algeria and wood pulp in large quantities from Norway and Sweden. Rags are also imported from Europe in considerable quantities. One firm of paper manufacturers uses rags entirely, while another uses only wood pulp.

The source of equipment of paper mills in the district is mostly English or home make. Much up-to-date machinery is used and a considerable number of American-made tools are in use. The estimated cost of several of the machines in use in Markinch is $200,000 each, one of the mills having four of such machines in operation, with two smaller ones idle. These machines need constant attention and repair, in one of the mills over 100 men being kept constantly on the repair squad, a night and day shift being employed.

EDINBURGH.

From Consul Rufus Fleming.

The paper used in this district comprises practically all classes known in any market, the bulk of it being medium to high grade. For the most part the various grades of paper consumed are of local manufacture; the writing and printing papers of fair to fine quality are largely produced in the counties of Edinburgh, Linlithgow, and Berwick, where the paper-making industry has been carried on for 200 years.

Various classes of paper are imported, chiefly news and wrapping papers and lower grades. News and common wrapping come almost exclusively from Norway and Sweden; strawboard is largely from the Netherlands. The imported drawing paper, ivory (card) sheets, and wall paper are German. India paper is an important article from Austria and France. This should not be confused with so-called Bible paper, which is quite different and much cheaper quality. Kraft paper comes principally from Norway, Sweden, and Germany. Some news and much fiber board are English made. It should be added that paper of many kinds comes into the Edinburgh market from north and west Scotland. Typewriting papers from the United States have long been sold here in considerable quantities. Whether it is practicable for American producers of other classes to compete with Scotch manufacturers on their own ground is a problem which American mill owners will readily solve for themselves. The main features of existing conditions in the trade in this part of Scotland are described below.

MARKET REQUIREMENTS.

This city is one of the most important centers of the printing trade in the United Kingdom. There are 160 printing establishments, large and small, employing 2,600 compositors, of whom about 1,800 are males and 800 females. The books printed and published here represent every branch of literature and science and are printed in many languages; and in addition to these publications a large amount of book printing is done for London publishers. The total value of the printing paper consumed annually is estimated by a well-informed dealer at $5,000,000, and of all classes of paper $8,500,000.

The kinds of paper most in use in Edinburgh and district are machine-finished printing, supercalendered printing, superfine printing, news, writing, litho and chromo papers, map papers, plate-glazed papers, loft-dried papers, animal-sized papers, enameled papers, millboard, fiber board, strawboard, kraft, ocher, and grocery papers.

In printing paper double crown is the common size for books and quad crown for larger editions; demy is used principally for pamphlets and double demy is also employed for books and pamphlets, quad demy being used generally for larger editions; for foolscap there is a regular demand from firms that print company prospectuses, etc.; royal, double royal, and imperial sizes are little used comparatively, but the quantity of each annually consumed is considerable. A great quantity of India paper is used by one extensive printing and publishing house, the weights varying from 32 pounds a ream up to 50 pounds. This house and other prominent concerns use scores of special sizes of paper and many different weights. Ordinary weights of standard sizes are: Double crown, 27, 30, 42, 50, and 60 pounds; demy, 35 pounds; double demy, 70 pounds; royal, 25, 33, and 50 pounds.

In writing paper the sizes and weights most in demand owing to the gradual outcome of trade requirements are: Foolscap, 15 and 18 pounds; pinched post, 18, 22, and 26 pounds; large post, 11, 15, 18, and 21 pounds; medium, 13, 15, and 18 pounds. The different foolscap sizes are all used for ledgers, etc., and foolscap also for note and legal purposes, the pinched post for note papers, and the large and medium post for commercial letter forms. The demand for small post and double large post is comparatively small. The paper in general use for social and commercial correspondence is of medium and high grade. A finish is required which will insure smooth writing with either a pointed or blunt pen.

In drawing and book paper the sizes most in use are royal, imperial, superroyal, elephant, double elephant, demy, and medium. By long experience they have been found best suited to the requirements of the public. Demy, medium, royal, and superroyal are used to a considerable extent for book work, as well as largely for drawing in public schools and art schools. Imperial, elephant, double elephant, colombier, and atlas are the engineering sizes in which the trade is constant and important. For antiquarian the demand is limited to special and very large drawings. The usual weights of these papers are: Demy, 24, 25, and 30 pounds per ream; medium, 13, 18, and 34 pounds; royal, 40, 42, and 44 pounds; superroyal, 50, 52, and 54 pounds; imperial, 72 pounds; elephant, 72 pounds; double elephant, 120 and 140 pounds; colombier, 100 pounds; atlas, 100 pounds; antiquarian, 240 pounds.

News, 40 to 45 inches, is in rolls weighing half a ton each.

Blotting paper is usually 25½ by 47½ inches, 38 pounds to the ream; also 40 and 60 pounds to the ream; white blotting of 80, 100, 120, and 140 pounds are also offered.

Tissues, white and colored, are generally 20 by 30 inches, 7 pounds to the ream.

In wall papers the British standard size is 21 inches by 12 yards; French size, 18 inches by 9 yards. The German standard size for the home market is the same as the French, but a large quantity of wall paper is made in German mills to the British size for this market.

Kraft paper is generally in 31 by 46 inch sheets; weight, about 70 pounds per ream. Ocher comes in sheets 31 by 46 inches; weight, 100 pounds per ream. The common size of millboard is 36 by 40 inches; 12 sheets to the hundredweight. The usual size of strawboard is 30 by 25 inches, 150 sheets to the hundredweight; sold in bundles of 56 pounds. Fiber boards of various kinds are kept in stock in 40 by 60, 40 by 58, 40 by 56, 30 by 40, and 26 by 40 inches. A sheet 40 by 58 inches weighs about 7½ pounds. Vulcanized fiber board (made out of cotton waste, etc.) is usually 40 by 56 inches, about 22 sheets to the hundredweight.

MATERIALS FOR PRODUCTION.

Excepting moderate quantities of rags, old ropes, and cotton waste, there is little local material for paper manufacture. Wood pulp is not produced in Scotland. Esparto, the principal material, is imported from northern Africa and Spain, wood pulp from Norway and Sweden, and rags come from France, Belgium, the Netherlands, Germany, and Russia. No rags imported are listed as Russian, but all firms in the trade are aware that large quantities sold in this market are of Russian origin. The imports of paper-making materials into the district in 1912 amounted to 138,466 tons. The quantities of each class are not given separately in the official returns. By firms in the different branches of the trade it is estimated that the approximate quantities were: Rags, 12,000 tons; wood pulp, 25,000 tons; esparto, 101,446 tons. As much as two-thirds of these materials were consumed in the district. No later statistics are available, but it is known that imports last year were heavy, at advanced prices.

The yield of paper from rags is about 90 per cent; from African esparto, 50 per cent; and from Spanish esparto, 55 per cent. In the manufacture of standard grades of esparto paper, sulphite pulp is mixed with esparto to the extent of 25 to 40 per cent.

Esparto.—Roughly, the esparto season is from August to August. Since the contracts for the present season were made prices have advanced, and buyers who have not bought their full requirements for the season will have to pay a considerable advance for the quantity they are short. This increase in price was caused by (1) the small imports from Tripoli, which has not yet recovered from the war; (2) drought in Africa and Spain, which has affected the esparto crop; and (3) a somewhat increased consumption in Great Britain, partly owing to a few new machines having been put down by the paper mills and partly to the higher prices of wood pulp.

The largest quantity of esparto comes from Algeria (first quality Oran), and some of the principal buyers managed to contract for this year as low as $16.12 per ton free on rails at port of arrival. One large buyer got terms as low as $15.81. At present (Jan. 10, 1914) the prices of Algerian per ton, free on rails, at port of arrival, are: Fair to good quality, $16.42 to $17; first quality, $18.25 to $18.86.

The quantity of Spanish esparto consumed by the mills in this part of Scotland is much smaller than it once was. The principal contracts for the present season were fixed at about $25 per ton free on rails. There is little business at this time, as nearly all buyers are fully contracted. The current prices, however, are, f. o. r. at port of arrival: Fair to good quality, $24.33 to $25.55; fine to best quality, $26.77 to $27.37.

Tunisian esparto (hand-picked sfax) and also Tripoli are about 91 cents per ton cheaper than Algerian. Contracts for the present season were as low as $15.33. There are few sellers at this time, and importers are having some difficulty in getting enough to fulfill their engagements. The current quotation is about $17.64 f. o. r. Tripoli; quotations are nominal.

OUTPUT OF THE MILLS.

There are 23 paper mills in the district, which have altogether 47 machines, ranging in size from 64 inches to 150 inches. They employ approximately 3,500 hands, of whom about 2,000 are males. Fourteen of the mills, engaged in the manufacture of printing, writing, and drawing paper, are equipped with excellent machinery, most of which was made by engineering firms in Edinburgh. The other mill owners, producing brown wrappings and coarser grades and millboard, leatherboard, and fiber board, have fairly efficient plants for their purposes.

During the last 10 years the mechanical facilities in the industry have been much improved, and the greater size and efficiency of paper-making machines have enabled manufacturers to increase production without any additional labor cost. It appears that manufacturing costs are less to-day than they were a decade ago, with the result that in the competition, which has become keener than ever, the manufacturers are supplying better qualities of paper at the old prices. The total production in 1913 of printing and writing paper of all grades is estimated at 57,000 tons, and of the entire industry at 68,800 tons.

COST OF LABOR.

In no other great industry are manufacturing costs as low as in paper making. Even when machines in the Scotch mills were 54 to 100 inches—not many years ago—the labor cost was less than 14.5 per cent of the total cost of production. The introduction of larger machines in the meantime—up to 150 inches—has greatly increased the output, while wages have remained practically at the same scale. It is true that materials have advanced somewhat, affecting the cost of production, but not to an extent sufficient to overcome the advantage of better machinery. Apparently the only benefit derived by the operatives from the increased production has been steady employment.

The operatives who work on day and night shifts work an average of 71 hours a week. All the workers in the glazing, rolling, cutting, and overhauling departments are day workers, and the greater proportion are women. The hours are 57 per week. The cutting and counting, overhauling, and packing departments, and the stock rooms employ the largest number of women.

The wages per week paid to the working people in the various departments of mills which manufacture the better grades of writings and printings are here given:

Paper machineman	$8.72
First assistant	4.99
Second assistant	3.74
Beaterman	7.48
First assistant	5.48
Second assistant	4.99
Potcherman	6.23
First assistant	5.48
Second assistant	4.99
Press pate machineman	5.98
Assistant	2.49
Head esparto boiler man	7.23
Assistants	5.99
Head roasterman	7.73
First assistant	6.73
Second assistant	5.98
Cost tracing man	5.98
Assistant	4.73
Laborers	4.49
Head paper finisher	8.23
Assistant paper finisher	$6.23
Head bater	7.98
Assistants	4.99
Head calender man	7.46
Assistants	6.23
Cutterman	5.99
Fitter	6.98
Turner	7.48
Blacksmith	6.98
Hammerman	5.48
Plumber	7.48
Greaser	5.48
Steam boiler man	6.23
Assistants	5.74
Women:	
Rag-house woman	2.99
Overhaulers in paper salle	3.48
Finishers in paper salle	4.09
Cutter girls	1.50

In the mills making coarse grades of paper—wrapping, grocery paper, etc.—and millboard, leather board, and fiber board, wages are on a slightly lower level.

In regard to the efficiency of paper makers trained in the Scotch mills there is only one opinion. On the practical side of the industry their experience had its beginning in tradition. As in woolen manufacture, one generation of workers follows another and the fittest become experts almost by heredity.

WHOLESALE PRICES.

The prices of standard local products most extensively used are approximately as follows:

Machine-finished printings	per pound	$0.04½
Supercalendered printings	do	.05
Superfine printings	do	.05½
Supercalendered superfine printings	do	.06
Writings	do	$0.06- .12
Litho and chromo papers	do	.06
Map papers	do	.07
Plate-glazed papers	do	.08
Loft-dried papers	do	.16- .20
Animal-sized papers	do	.07- .10
Enameled papers	do	.07- .10
Account-book paper, 8 qualities	do	.06- .24
Art paper, tinted, large post, 30 pounds	per ream	1.94
Art paper, demy, 35 pounds	do	2.31
Art paper, double demy, 70 pounds	do	4.62
Art paper, double crown, 50 pounds	do	3.34
Bible paper	per pound	.04- .11
Blotting paper, various	per ream	2.60- 5.35
Drawing paper, 10 qualities	per pound	.06- .24
Illustration paper, 10 qualities, from 18 by 23 to 20 by 40 inches, weight from 28 to 100 pounds	per ream	2.49- 8.39
India paper	per pound	.14- .30
Ivory board, royal, 20 by 25 inches	per gross	1.46- 9.73
Ivory board, royal, 20 by 25 inches, average	do	3.16
Kraft paper	per ton	68.13
Label paper, 6 qualities, 20 by 25 to 23 by 36 inches, weight from 25 to 56 pounds	per ream	2.12- 4.38
Litho and chromo paper, various qualities	per pound	.06- .18
News	do	.03- .04½
Ocher	per ton	43.80
Printings (general), 24 qualities	per pound	.04- .11
Pulp boards, 10 qualities	per gross	1.58- 2.60
Pulp boards, antique artistic	do	2.61- 2.79
Tissue paper	per ream	.48- .68
Tinted special paper and boards, demy, double crown	do	3.40- 5.47
Typewriting paper (pure linen and other), 30 qualities, legal size	do	.36- 1.46
Wall paper, various	per roll	.08 up.
Writing paper, 16 qualities	per pound	.06- .23
Writing paper, bank, 4 qualities, large post	per ream	1.21- 3.16
Writing paper, special, 5 qualities	per pound	.10- .32
Writing paper, tinted, 4 qualities	do	.07- .12
Millboard, average quality	per hundredweight	6.32
Strawboard, average	do	1.82- 2.07
Fiber board, various	do	9.25-10.46
Vulcanized fiber board	do	12.17

The main foreign articles quoted above are news, India, kraft, ivory board, strawboard, ocher, and pulp boards. Higher grade drawing and record paper of German manufacture is 4 cents to 6 cents per pound lower than the same Scotch grade.

The general trade terms, British and foreign, are 5 per cent discount at 30 days. For the heavier and coarser goods, fiber boards, etc., the usual terms are one month 2½ per cent or cash 3¾ per cent.

EXPORTS.

Several classes of the paper of local mills, principally printing and writing of medium grades, are exported to nearly every country in the world, chiefly to India, Canada, Australia, New Zealand, the United States, Japan, and South Africa. In the official statistics there is no classification of exports of paper; only the total quantity and value are given. Moreover, the exports from Leith (the port town of Edinburgh) do not nearly represent the outward movement, as a considerable proportion of shipments go by way of Liverpool and Glasgow. The quantities and values of Leith exports for five years up to December 31, 1912, are here shown:

Years.	Hundredweight.	Value.
1908	48,586	$282,529
1909	50,901	287,026
1910	64,087	351,751
1911	83,505	472,065
1912	101,578	570,295

The returns for 1913 will, it is believed, show an even more marked increase in the sales of Edinburgh paper abroad.

IMPORTS.

The official returns of imports of paper into this district give only the total quantity of all classes, which figures include also "articles of paper." The statistics for two calendar years to December 31, 1912, are as follows: 1911, 795,686 hundredweight; 1912, 899,998 hundredweight. Approximately one-half of these quantities of paper passed through to other parts of Scotland, principally to Glasgow.

The most important classes of paper imported are news, wall, wrapping, kraft, India, drawing and record, ivory board, wood-pulp board, millboard, and strawboard. There is little foreign competition in book printing paper with the exception of India paper from Austria and France. As before noted, this paper, chiefly the Oxford Press make, is much used in Edinburgh, although not to the same extent as the thinner and lower-priced Bible paper, which is not known in the Scotch trade as "India" or even "imitation India," but as either "Bible paper" or "thin printing." India paper is made of rags; the other light-weight papers are made of sulphite pulp, with more or less clay filling, the better qualities containing some esparto. In medium to fine writings foreign manufacturers and exporters have not yet seriously interfered with the Scotch producers. The foreign gains have been large, however, in lower classes—news, wall, millboard, strawboard, etc. Kraft, from Norway, Sweden, and Germany, is having an extraordinary sale in this market, for various purposes, including the manufacture of envelopes for catalogues, folders, booklets, etc. Its comparative lightness and toughness and smoothness have gained it preference over ocher and other cheaper papers of the kind for all common uses.

The state of the wall-paper trade is peculiar, in that it is the only department of the paper industry in which a British trust exists. The methods of this trust were described in a report from this office published in Daily Consular and Trade Reports of January 8, 1907. Thus far the combination of British wall-paper makers, formed many years ago, has not been able to prevent German concerns from getting into the market through the independent wholesalers in every large city. These concerns gradually built up a trade by offering goods at prices much lower than the combination's list prices. An inquiry into this competition discloses an interesting situation. Taking German paper and British paper of the same quality, the one is sold to wholesalers at half the price of the other; thus, a German-made piece or roll (12 yards long, 21 inches wide) is quoted to wholesalers at 12 cents and a British piece at 24 cents. In the hands of the wholesalers the German piece is listed at 48 cents and the British at 97 cents. In each case the division of profit between the wholesaler and retailer is altogether a matter of arrangement. Throughout the scale of qualities a similar difference in prices is noted, in the case of original patterns; but when any excellent new design is put on the market by a foreign manufacturer, it is immediately copied and the copy sold at 40 to 50 per cent less than the original, as a method of discouraging foreign competition. This tends to prevent outsiders from showing too much originality. But the standard patterns offer a wide field for business, and the German makers are cultivating it with some success. American wall paper is highly regarded by the Scotch trade and might find a profitable market here if adapted to the requirement as to size—21 inches by 12 yards.

CHANGES IN THE PAPER TRADE.

During the last six or seven years important changes have taken place in the local paper-making industry and in the import and export trade. Larger and better machines—of Scotch manufacture, with few exceptions, as noted above—have put the industry on a broader basis and enhanced the efficiency of mills engaged in the production of medium and fine classes of paper. The results are seen in the steadily increasing exports of such paper to continental Europe, and more notably to the British colonies and the Far East.

In the import trade the important developments have relation to the shifting of sources of supply of different classes of paper. Norway and Sweden have lost most of their east Scotland trade in the better grades and gained greatly in news and packing and lower-grade products. Germany has lost in news and all printing and writing, except drawing and ivory board, and gained in lower qualities and in wall paper. The Netherlands have very largely increased their sales of strawboard and wrapping and packing and have lost in millboard and wood-pulp board. There has been a marked decline in the Scotch trade of Belgium and France in printing and writing. Canada's news trade in this market, once considerable, has disappeared.

A noteworthy tendency, growing out of the extensive and increasing use of thin paper for various kinds of books, is the frequent choice of India paper for printed record books and law reports, in order to save space in libraries and offices. In an old country, with none too many new buildings and none too much room in old ones, sometimes the housing of books becomes a difficult problem. It is said that the printing of the reports of the Supreme Court of Scotland on India paper is contemplated.

A factor which is not new, but of more importance than ever, is the keenness of the local competition in the paper trade, the paper-making industry, and the manufacture of paper-making machinery. To a considerable extent this is due to the proximity of the paper-producing countries of continental Europe, and especially to the concentration of cheap pulp-paper manufacture in Norway and Sweden, which limits the field of local paper makers. In production few possible economies have been neglected which would enable the Scotch mill owners to extend the sales of their special grades of paper in the world's markets. The one thing lacking in this part of Scotland for the most economical manufacture of paper is convenient water power; except for minor purposes, steam power must be used in all mills. But apart from the item of fuel it may be doubted if manufacture has been brought to a lower level of cost in any other country. Yet, generally speaking, the margin on sales of paper to dealers, printers, and publishers (for publishers, as a rule, purchase the paper to be used by their printers) is very narrow. In a superior or fancy grade the reputation of a particular mill may count for much in the home market, and it has been by carefully specializing that the important mills in east Scotland have earned substantial profits.

GLASGOW.

From Consul John N. McCunn.

Of the total number of paper mills in Scotland about 16 are in this district. There are no pulp mills in this consular district.

All classes of paper are in use here, and most of these are produced in this district, such as writing, bond, ledger, and linen, book paper of every class from the ordinary to the Bible and India papers, news papers, wrapping papers of a wide variety, wall paper, manila, tissue, blotting, parchment, carbon, and all kinds of boards.

The wholesale prices of home and imported products vary greatly between the lowest grades of paper and the highest, and also vary greatly according to the quantity of paper ordered to be made at a time. Ordinary news paper, for instance, is being sold at about 2 cents per pound, or perhaps even a shade less. The variety of quality of paper is so great that it would be almost impossible to give a definite idea of standard price for any particular class of paper.

It is quite impossible to arrive at the quantities used in this district, or even the kinds most in demand, as the papers used are so diverse and come from so many sources, both direct and through various middle men. Heavy wrappings, however, and nature browns are largely used, as well as the better classes of writing and printing papers.

With regard to business books, such as ledgers, cash books, and other office requirements, these are generally of a very substantial make and are strongly bound. High-class papers are generally used commercially. except by railway companies.

For the 12 months ended November 30, 1913, Scotland imported 27,608 tons of linen and cotton rags, 868,633 tons of wood pulp from Finland, and 162,054 tons of esparto grass from Spain, Bona, Oran, and Tripoli.

The principal source of supply for rags and waste papers are Ossett, Dewsbury, Leeds, Bradford, Heckmondwike, Elland, and Pontefract, all in the county of Yorkshire, England. The rate of freight by canal from these stations to Hull, England, thence by steamer to Scotch ports, thence by rail or cart, averages about $4.86 per ton of 2,240 pounds.

The exports of paper and paper stock from Glasgow to ports in the United States during 1913 amounted in value to $501,511.52. A small percentage of that total includes new paper, principally wall paper, and the balance, as paper stock, is composed largely of old linen and cotton rags. Statistics of the imports of manufactured paper into this district are not available.

HUDDERSFIELD.

From Consul Franklin D. Hale

Careful inquiry gains the information that the papers of various kinds used in this city and district are principally of British manufacture.

The supplying of this market with paper seems to be a proposition of price, quality, style, adaptability to the special need, and the convenience of being able to obtain the filling of an order in the least amount of time; and last but not least, the conservative idea of continuing to buy from the same manufacturer or wholesaler year after year so long as there is satisfaction between seller and purchaser.

It is impossible to predict safely what success American manufacturers of paper might meet with in this market if they should systematically and actively push their goods. Certain it is there can be no sales if the goods are never offered for examination, their merits explained, and their purchase urged.

The problem is, How can this be best accomplished? There are no importing houses or jobbers located here, and the market is supplied direct from the mills in this country, or wholesale houses; or, in the case of special papers made in other countries, they are obtained through importers or jobbing houses in London or Liverpool; so if this district were to be visited in the interests of the paper manufacturers of America, it would probably best be done by salesmen from the London or Liverpool houses, unless salesmen direct from America should be in this country covering the larger field.

There are no exports of paper from the district, and it is impossible to estimate the amount of paper of foreign manufacture used, but it is not a large amount. Some printings are of German make, but the importations are not direct.

LEEDS.

From Consul Homer M. Byington.

Leeds, with large firms of wholesale stationers, general printers, and widely read newspapers, has a big demand for paper of all classes. The only American paper that I can learn of as being or having been in demand is "bank" or "bond" paper, but one manufacturer states that it is now being supplied in greater quantities than hitherto by the home manufacturer. American papers are generally too high in price for this market.

The users are served from the mills or from the makers' agents in London, the first source being as follows for the particular papers mentioned: Newspaper and cheap printing, Lancashire and other English mills and Canada (the Leeds Mercury is one of Harmsworth's publications and that firm have their own pulp and paper mills in Canada); placard and wall paper, Germany, Norway, and Sweden; white printing paper, England; all writing papers, England; blank or bond paper, typewriter, and circular, England and America; brown paper, packing paper, and draft paper, Germany and England; tissue and copying papers, chiefly Lancashire; strawboards, group of mills in Holland; leather board (for milliners' boxes), Germany; hand-made paper, England.

With firms doing the cheaper kinds of printing, school stationery printing, news printing, paper bag and paper box making, account-book making, etc., the demand for paper is varied and good.

Local mills are equipped with homemade machinery, Edinburgh, Scotland, and the county of Lancashire in England supplying the bulk.

The last census, published in 1913, gave the average weekly full-time earnings of workers in paper manufacture as follows: Men, 29s. ($7.04); boys, 10s. 8d. ($2.59); women, 11s. 11d. ($2.89); girls, 7s. 6d. ($1.82); all workpeople, 20s. 4d. ($4.94).

Inquiries to-day confirm foregoing generally, but show that boys, women, and girls in this part of the country (Yorkshire) are getting a little more than the average on account of the demand there is for that labor in the textile factories.

Leeds being inland, no means are available for obtaining imports and exports for the district.

The general method of quoting prices is either at a price per ream, based upon its nominal weight, or at the weight by the pound, packed in reams or in reels. Wrapping paper is sold at scale weight. Merchants allow 5 per cent to approved accounts with wholesale stationers.

LIVERPOOL.

From Consul Horace Lee Washington.

In writing of the market for paper in the Liverpool district the most important practical fact to be stated is that this is neither an importing (much of the paper that arrives at this port is in transit) nor wholesale center of that product, nor is there any manufacture. There exist wholesale houses, but they only deal with a comparatively small volume of business when considered in relation with the wholesale paper trade of the country, which centers in London, and from which point, according to information obtained from dealers here, the trade of the country is very largely directed and controlled, London wholesale merchants dealing both direct and through sub-agents in various parts of the country.

The use of paper of all kinds in Liverpool is, however, very extensive, by reason of the large population of the city and to its being an important shipping, commercial, and trading center. A large wholesale jobber of paper writes on the subject:

> It is evident that in a large city like Liverpool there must be all kinds of wrapping papers (good and bad qualities) used by grocers, drapers, general stores, etc., also large quantities of stationery papers, high class and otherwise, according to the pockets and tastes of the users. As regards the exact quantities it is impossible to say. Vegetable parchments, grease proofs, and kraft browns, are exported from the Continent to Liverpool in large and ever increasing quantities, as the English mills do not appear to make these papers successfully. There are no paper mills in Liverpool district, but many in Blackburn, Darwen, and Manchester districts. There are, I think, only two paper mills in England making their own wood pulp; although the material is increasing very much for paper making. The English mills buy it from the Continent, thus being at a great disadvantage with their competitors in, say, Norway and Sweden, where the paper mills make their own pulp.

There are no book-publishing houses in the Liverpool district, and the use of paper is, no doubt, somewhat smaller on this account than would ordinarily be the case in a city of its size and importance. There are no statistics of any kind published upon which even an approximate estimate of the consumption of paper could be based, but it is estimated by two of the principal wholesalers that at least 90 per cent of the paper consumed in the district, save for printing newspapers, is of English manufacture.

There are no pulp mills in the district, and only one paper mill, situated in north Wales, which produces a high-grade handmade paper. Those interested in the paper trade in Liverpool state they are unable even to approximate the output of this mill, but the plant is known to be a small one, and its output can not be regarded as including Liverpool in the list as a paper producing district.

American paper is not unknown in Liverpool, although the importations are comparatively small. A wholesale merchant in Liverpool states that he keeps a stock of particular kinds of American papers, and that he is in touch with American maufacturers. He, however, complains that certain American manufacturers of paper export only through one company in New York, and that this system influences his interest in the products of those firms.

MARKET REQUIREMENTS.

As before stated, it is impossible to state even approximately the amount of each kind of paper used in the district, as there are no official or even trade statistics on the subject. It is definitely stated, however, by those in the trade, that a large business is done in all kinds of paper, and that the great bulk used consists of cheap white paper for printing, cheap colored glazed and unglazed papers, and cheap classes of cream-laid writing papers. These classes of paper are imported very largely from Norway, Sweden, and the Continent. The wholesale price of imported cheap white paper for printing averages from $0.0225 to $0.035 per pound; colored papers for printing range in price from $0.015 to $0.035 per pound, all delivered in warehouse in Liverpool.

In addition to cheap grades of paper for printing, there is also a large demand for high-class paper for the same purpose, there being a tendency, as a large dealer asserted, to produce printing of an artistic nature, which necessitates the use of a high-grade paper.

The terms of sale by home manufacturers and by the manufacturers of Norway, Sweden, and the Continent to merchants and jobbers of paper in Liverpool are usually 5 per cent in one month, extended to three months at the same rate in exceptional cases. As against these terms the Liverpool wholesale merchants assert that the terms of sale by American manufacturers stipulate for a discount of 2 per cent and for delivery only on the quay instead of in warehouse, and it is urged that if the American manufacturers conformed to the existing terms of the home and continental manufacturers in this respect it would be very much preferred.

IMPORT TRADE.

One firm states that the usual method of the paper trade in this country is for foreign exporters to appoint an individual or firm to act as its sole sale agent here. The firm referred to very highly recommends several makes of American-manufactured paper, and particularly mentioned "cover" papers as being of a high and artistic grade and likely to meet with increasing sales in the English market. This belief in extended sales of American papers, it was stated, was not confined to "cover" papers alone but to all kinds of paper. The firm wrote on the subject as follows:

> Saleable papers required: Cover papers and boards (artistic and exclusive); writing papers, medium and good qualities; typewriting and bond papers, white and tinted, medium and good qualities; rotary offset papers; index-card boards; carton and box boards; Bristol boards; white pasteboards.
>
> Stocks are usually held by the English agent of an American manufacturer, and in some instances sizes are made to suit the English market, particularly in the cover and board sections.
>
> The cover paper and board sizes suitable for this country are as follows: 18 by 23, 20½ by 25½, 20½ by 30½, 23 by 26.
>
> The American sizes of writing papers, typewriting and bond papers, index-card boards, and carton and box boards are quite suitable for the English market.
>
> It is the practice of the American mills to print attractive sample sets with the sale agent's name on the same, free of cost, so that they can be freely distributed.

A special factor as likely to have an important bearing and influence upon the sale of American paper is the matter of supplies. It is pointed out by those engaged in the trade that supplies can be obtained, at a few hours' notice by phone or wire request, from the home manufacturers, or from the agents in London of manufacturers in Norway, Sweden, and the Continent; and it is a matter of necessity, if increased sales are to be effected and the trade retained, that the American manufacturers place sufficient stock in this country and keep it maintained, so that the various descriptions of paper may be as readily obtained.

TOILET PAPER.

The Liverpool market is supplied with various kinds of perforated toilet paper made up chiefly into rolls and priced at 3d. (6 cents) and 6d. (12 cents) per roll. These rolls are manufactured in London in two qualities, viz, coarse and fine. There is practically no demand for toilet paper made up into packages.

MANCHESTER.

From Consul William H. Robertson.

Practically all kinds of paper known to the trade are made here, with the exception of certain specialties from other countries that can not be produced, or at least at competitive prices. For instance, it is legally forbidden to manufacture a certain parchment paper that is made in Germany, on account of the injury of the acids to the English water streams. Such papers, also, as grease proof, metallic, most metal leaf, the finest qualities of tissue paper, etc., are not manufactured here, but are brought in chiefly from Germany. The English gold leaf, for example, must be of 23½ carats, while German gold leaf of 22 carats is imported. It is believed that the American manufacturers might successfully compete in this market in the special articles just mentioned, and that they could largely increase their exports hither of strawboard, cardboard, and cartons for box making. In other words, it is strongly advised that American exporters of many lines of papers should send over a few samples each of their various products, with detailed prices and terms, in order that dealers here may tell at a glance whether or not the articles might be competitively introduced into this market. This is the only practical method by which the question can be determined.

It is thought that there is a distinct desire here to purchase American-made papers in preference to either German or Scandinavian, the general impression being that the materials for the manufacture of many kinds of paper are as cheap in America as in European countries, while trading with English-speaking nations would generally be preferred.

The manufacture of wall paper in this district is largely in the hands of, and controlled by, the Wall Paper Manufacturers (Ltd.), being a combination of the largest manufacturers.

As far as can be ascertained, American wall paper is not sold in Manchester. The few mills that print wall paper obtain their paper supply from the English mills and from Norway and Sweden. Wall paper is largely imported from Germany, small quantities are obtained from France, but local dealers obtain the bulk of their supplies from English makers.

It is impossible to state, or even estimate, the amounts of each kind of paper used in this district. According to a prominent paper maker's agent, the following kinds might find a market: Hard-sized, supercalendered, and machine-finish white lithographic papers; engine size and tub size cream wove and cream laid; glazed imitation parchment; machine glazed and supercalendered printings, writings, and glazed casings of various shades and colors.

The following table shows the quantities in tons of 2,240 pounds of imports of paper from foreign countries through the Manchester Ship Canal during the years 1909 to 1913:

Countries and cities.	1909	1910	1911	1912	1913
Norway and Sweden	27,219	34,741	37,496	40,001	36,671
United States	8,017	4,288	2,054	182	144
Canada	6,935	5,774	4,317	7,392	8,910
Continental cities: Rotterdam, Antwerp, Hamburg, etc.	5,177	5,929	5,610	6,466	6,110

There has been no special change in recent years of the trend of the import trade or in the sources of supply, although it will be noted that the direct importations from the United States to Manchester have materially decreased during recent years. However, this does not follow that supplies have decreased, as quantities reach this market through other English ports, figures covering which can not be obtained. With regular fortnightly services from the ports of New York, Boston, and Philadelphia to Manchester it would be advisable for our manufacturers and exporters to fully consider the shipping of their goods via the ship canal to Manchester. The canal company confidently asserts that there is a saving in handling charges, etc., and it would be well for the American exporter to note that the New York representative of the Manchester Ship Canal Co. is Gloster Armstrong, room No. 6, 16 Beaver Street, who will at all times give information as to freight rates, etc.

There are no special features influencing the paper trade in the Manchester district, such as shipping facilities and customs duties, there being none of the latter.

PRICES AND TERMS.

The method of quoting prices and terms usually granted to importers is that it is customary to allow 5 per cent discount, payment in one month from date of bill of lading. In some instances firms may offer an extra discount of 1½ or 2½ per cent for payment against documents through the Manchester banks. It must be understood, however, that terms vary according to private arrangements.

NEWCASTLE-ON-TYNE.

From Consul Walter C. Hamm.

This city is not a center for commercial houses, and there are only a few paper mills in this neighborhood. Consequently, there is no great demand for paper here and only a moderate interest in its manufacture. A large variety of paper is used, however, but in limited quantities only. One dealer, whose case may be taken as typical, states that he has 1,500 or 1,600 different kinds of paper in stock, but a small amount of each kind.

As regards selling American papers, it is stated that for cheap grades the freight would prove to be excessive, but that at the same time a business could be done in the higher grades of cover papers, bank and bond papers, and also in boards at competitive prices. There is a good market for gray boards similar to those made by the Laurentide Paper Co., Canada.

In general it may be said that the paper that comes to Newcastle is from varied sources. The bulk of the printing paper is of home production, together with wrapping papers of a common grade. Cheap grades of printing papers are imported from Belgium, Norway, and Sweden, and considerable quantities of wrapping paper, grease proof, etc., are imported from Norway, Sweden, and Germany. There is also a good deal of Norwegian and Swedish news paper used in this district.

As far as the wrapping papers are concerned, of recent years the tendency has been to go on to foreign kraft papers for this class of trade to the exclusion of the home production. Newcastle is very favorably situated for Norwegian, Swedish, and German (shipped via Rotterdam) shipments, and this would weigh against importations of American paper.

Prices usually quoted are per pound for printing papers, per ton for wrapping papers, and per ream (mostly 480 sheets) for thin tissues and the like. The usual terms quoted to the wholesale stationers are

5 per cent for monthly accounts, although some of the large wholesale houses have 5 per cent for quarterly accounts. Wholesale importers or agents, who sell to the wholesale stationers, have special arrangements with the mills if they invoice the goods themselves.

NOTTINGHAM.

From Consul Samuel M. Taylor.

The fact that Nottingham is one of the largest centers for the manufacture and shipment of laces in the world is the factor which decides the character of the paper supply in this district. Thus the varieties of paper products which enjoy the largest comparative consumption in this part of England are the tissues in which the laces are wrapped and the cardboard on which the lace is wound, together with the fabric paper with which packing cases are lined.

The bulk of the paper used in this district is purchased from wholesale houses in Manchester and in the County of Lancashire. The best and largest factories are in the County of Kent in the south of England. With the exception of rice paper, which is used to some extent in the cigarette industry and which is imported from France, each and every class of paper used about here is of British manufacture, but at the same time the source of supply lies entirely without this consular district. With the exception of tissues, boards, and linings referred to above in connection with the lace industry, all other classes of this product are distributed in quality and in use in the same proportion as in American districts having a distinct commercial character.

The only American paper that has been used here, so far as can be ascertained, has been a very light tissue such as is employed in the packing and wrapping of silverware. This, however, is no longer in use as it was claimed that the paper contained certain acid properties from the manufacturing process which tarnished the metal that it contained.

Paper consumers in this district have had so little experience with American products that it is very difficult to forecast the success with which American products would be received, but it is safe to venture that only the most determined efforts managed by personal representatives would uncover a paying market for United States paper exporters in this consular district.

In retail stores, toilet paper is sold to private families at 2½d. to 6½d. (5 to 13 cents) per roll, the roll containing from 480 to 500 sheets. The bulk of this paper is made in Great Britain, and the number of varieties is very great.

PLYMOUTH.

From Consul Joseph G. Stephens.

The local trade is supplied entirely by wholesale houses in the great distributing centers of the Midlands, but principally from London. West of England buyers visit London periodically and there make their contracts and purchases. Commercial travelers pay frequent visits to this district to supply small and special requirements. Investigation shows that thus far no effort has been made to sell American papers in this market. Whatever is accomplished in this line must, however, be done through London, for it is from that great center that the bulk of all the supply is received. Many of the Plymouth firms are branches of large concerns with headquarters in London. It is, therefore, to the report of the consul general in London that interested parties must be directed for information and guidance.

SHEFFIELD.

From Vice Consul Rice K. Evans.

Five years ago a large percentage of the news and wrapping paper used locally was imported from America, and it was estimated that at that time the total import of this sort of paper amounted to 5,000 tons per annum, or even more. This was due not so much to any lack in quality as to the English manufacturers' inability to meet the price of the foreign-made article. However, since that time the manufacturing system has been revolutionized, modern equipment installed, and the entire process brought up to date. Also manufacturers here were by various means able to force down the price of raw fiber until to-day they are practically again in possession of the home market.

Because of Sheffield's geographical position, one factor operates to the detriment of the import trade, namely, freight rates. On low-price stuff, such as news paper, the carriage charges from the seaboard to Sheffield will amount to 5 per cent of its value. This factor materially assists the local producer in holding the local market.

Credit in the paper trade seems very elastic. Most paper is bought on 90 days' time with from 3 to 5 per cent discount. After the 90 days the discount is reduced one-half of 1 per cent per month.

In the field of wrapping papers the Sheffield market is peculiar in that the trade demands a certain character of paper known as casing paper. Its peculiarity lies in that it must be so made as to exclude moisture and must itself be absolutely dry. This sort of paper is used in the wrapping of files, cutlery, and bright goods. It is almost entirely of local production. There are various grades for various commercial purposes, ranging in price from £30 to £40 ($149 to $194) per ton. It is marketed in reams.

Another sort of wrapping paper known as draper's is sold at about £25 ($121.66) per ton. About 60 per cent of this grade of paper used in Sheffield is of British manufacture; the remaining 40 per cent is imported from Scandinavia.

NORTH AMERICA.

CANADA.

OTTAWA.

From Consul General John G. Foster.

In spite of a large increase in the Canadian production of paper, there has been during the past five years a very great increase in the value of papers imported. The United States has held a predominant position in this Canadian import trade, supplying with remarkable steadiness 68 per cent of the entire paper imports. There seems every reason to assume that to whatever extent Canada purchases papers from abroad in the future, she will continue to obtain a large percentage of these foreign supplies from the United States; but the rapid construction of pulp and paper mills in the Dominion is necessarily a very important factor in determining the possibility of selling American products here.

It is estimated that there are in the Dominion of Canada 384,000,000 acres of land covered by timber of commercial size, as follows: In Nova Scotia, 5,000,000 acres; Quebec, 100,000,000 acres; New Brunswick, 9,000,000 acres; Ontario, 70,000,000 acres; in the three Prairie Provinces, 100,000,000 aeres; British Columbia, 100,000,000 acres. White spruce are the trees of greatest commercial importance in Canada, and these provide a very large supply of the best pulp wood.

Numerous great water powers, capable of development at low cost, have made Canada a very inviting country for the establishment of pulp mills, and in consequence there is now obtainable a large supply of wood pulp at low cost for the manufacture of paper. A part of this wood pulp is exported, but the manufacture of paper in Canada is steadily increasing and there is not, therefore, likely to be in this market any very great increase in the sale of American papers of the cheaper or more usual grades.

PRODUCTION OF CANADIAN MILLS.

The pulp-wood consumption in Canada showed an increase of 28.8 per cent for the year 1912 over 1911, and amounted to 866,042 cords of wood valued at $5,215,582. There were 48 pulp mills in operation, of which 24 were in Quebec, 11 in Ontario, 4 in New Brunswick, 2 in British Columbia, and 7 in Nova Scotia. The wood-pulp production in 1912 was as follows: Mechanical, 499,226 tons; sulphite, 142,978 tons; sulphate, 33,469 tons; soda, 6,959 tons.

Of the foregoing, Quebec produced 339,987 tons of mechanical, 83,005 of sulphite, 33,469 of sulphate, and 2,959 of soda. Ontario's production was 110,612 mechanical and 31,647 sulphite, while New Brunswick, British Columbia, and Nova Scotia are together credited with 48,627 tons mechanical, 28,328 tons of sulphite, and 4,000 tons of soda.

Government statistics are not available for the year 1913, but from another source I am informed that the pulp mills of Canada now have a per diem capacity of 3,091 tons of ground wood pulp, which on a basis of 300 days would give an annual production capacity of 927,300 tons. It is also reported that the sulphite mills have a capacity of 685,000 tons, which would give an annual production capacity of sulphite pulp amounting to 205,500 tons. The wood pulp exported from Canada during the calendar year of 1912 amounted to $5,952,361, of which $4,525,569 went to the United States, $1,384,893 to Great Britain, and $41,899 to other countries. In the calendar year of 1913 the exports were as follows: To the United States, $4,471,939; to Great Britain, $1,172,850; and to other countries, $268,873; making a total export of wood pulp that year amounting to $5,913,662.

MARKET REQUIREMENTS.

The Canadian market requirements for different classes of paper are substantially as follows:

The common sizes for writing paper are 17 by 22, 19 by 24, and 17 by 28 inches, and double these sizes. The weights vary from 14 to 20 pounds per ream of 500 sheets, 17 by 22 inch size, and the finish of the paper is very smooth. Bond paper is generally furnished in the same sizes, but the weights on this paper vary from 13 to 24 pounds per ream, 17 by 22 inch size, and it is furnished in many different colors. The finish is generally what is called bond finish, although occasionally this stock is linen finished. Ledger paper is used in sizes 16 by 21, 17 by 22, 18 by 23, 19 by 24, and 17 by 28 inches, and double these sizes, although there are several sizes furnished for special use for loose-leaf books. The finish is practically the same as that of bond paper, but the weights run considerably heavier, generally about 24 or 28 pounds per ream, 17 by 22 inch size.

Book papers are used in sizes 24 by 36, 25 by 38, 28 by 42, 32 by 44, and 38 by 50 inches, and run in weight from 50 to 80 pounds per ream of 500 sheets, 25 by 38 inch size. This stock is furnished in many different finishes, although the ordinary machine finish and supercalendered paper is in more general use. In addition to this, book paper is made in finishes called antique, ripple, cobweb, handmade, etc. Bible and India papers come in about the same sizes, but are, of course, of very light weight.

News paper is generally used in rolls varying in width from 30 to 77 inches, although rolls of much smaller width are used for special job work. Certain newspaper concerns are not equipped with roll presses, and use news paper in sheets. This comes in over a dozen different sizes, but those most generally used are 24 by 36, 30 by 44, 32 by 44, and 25 by 38 inches. The standard color is blue white and the basis of weight is 32 pounds per ream of 500 sheets for the 24 by 36 inch size.

Wrapping paper, including manila, kraft, and fibers of different kinds, are generally furnished in sheets 24 by 36, 30 by 44, 40 by 48, and 48 by 64 inches, although many other sizes are in use which are even smaller than 24 by 36 inches, such as 12 by 28, 15 by 20, etc. Nearly all wrapping paper is furnished in rolls as well as in sheets. These regularly vary in width from 9 inches to 36 inches, but of course can be slit to any width desired, or made larger at the mill when used for special purposes. Generally speaking, wrapping paper varies in weight from 25 to 80 pounds per ream of 500 sheets, 24 by 36 inch size, although much heavier weights can be obtained by special orders.

Tissue is sold in sizes 24 by 36 and 20 by 30 inches, also in small rolls. It is of course very light in weight, and the number of sheets in a ream vary from 400 to 480, according to the particular grade.

The standard size for blotting paper is 19 by 24 inches, and the weight is generally about 100 or 120 pounds. It comes in all colors and in various finishes.

The standard size for cover paper is 20 by 25 inches, but it is also furnished regularly in sizes 22 by 28½, 22½ by 28½, 20½ by 25½, and 20½ by 25 inches. The weights vary from 25 to 65 pounds per ream of 500 sheets, 20 by 25 inches. Sometimes the heavier weights are made by pasting two or more plys together. Cover paper is made in more varieties of finishes than any other paper product. Those in most general use are the ordinary sizes in supercalendered, antique, ripple, crash, plate, cobweb, handmade, etc.

Cloth-lined stock is generally used in size 22 by 28 inches. The only kind of parchment used to any considerable extent is vegetable parchment, which is used for layers in containers of perishable products, such as ice cream, butter, etc. This comes in sizes 24 by 36 and 8 by 11 inches and in circles of different sizes. The usual size for wax paper is 24 by 36 inches, 480 sheets to the ream, although it is often sold in rolls for special purposes.

Carbon papers are not generally handled by paper houses, being sold through ink and typewriter factories. The usual size is 24 by 31 inches.

Strawboard, chip board, combination boards, wood-pulp board, jute board, etc., have a standard size of 26 by 38 inches, and the thickness is indicated by the number of sheets of this size to a 50-pound bundle. Patent coated boards, solid manila, box board, and tag board are generally made in size 24 by 36 inches, although the latter is also used in size 22 by 28. The standard size for pressboard is 24 by 32 and it is generally used in two weights, 60 and 100 pounds to the ream of the size mentioned. The standard size for Bristol board is 22½ by 28½ inches, and this stock is used in thickness from 2 to 10 ply and in several different finishes, such as plate, kid, vellum, etc.

Cardboard such as plain white blanks and coated lithograph blanks is generally used in size 22 by 28 inches. Clay-coated box board is furnished in several different sizes, but 28 by 44 is the size in greatest demand. Mounting board usually comes in size 22½ by 28½ in 2,3, and 4 ply. Illustrating board and mat board is a very heavy stock, which is usually furnished in sizes 30 by 40 and 30½ by 40½ inches.

OUTPUT, WAGES, AND PRICES.

There are about 14 paper mills of large capacity in Canada, some of these making over 200 tons of news print paper per diem with an aggregate daily capacity of 1,608 tons. Other Canadian paper mills have an aggregate per diem capacity as follows: Strawboard, 40 tons; wood board, 106 tons; box board, 190 tons; kraft sheathing, 40 tons; roofing and sheathing, 64 tons; kraft paper, 120 tons; leather board, 10 tons; wrapping and manila, 167 tons; tissue, 20 tons; hanging, 20 tons; sulphite pulp or kraft pulp, 241 tons; book, 80 tons; writing, 62 tons.

In 1911 the time cost of labor was given as ranging from 2.64 to 6.3 hours of labor per ton. The money cost of labor ranged from, $0.82 to

$1.84 per ton. Since that date the wages of labor in the paper mills, I am informed, has increased fully 10 per cent. The time cost has probably been somewhat reduced upon the average.

The Fourdrinier or paper machines are said to be all manufactured in the United States. In 1911 the Canadian machines showed an average of 31 tons. This relatively high average was due to the fact that the Canadian mills were nearly all new, and the large increase of new mills in the last three years would presumably bring the machine efficiency to a still higher average.

An increasing number of managers and superintendents are Canadians and Canadian trained, but a considerable percentage of American trained men are still found in Canadian paper mills. In 1911 the tariff board reported that the total average labor cost in Canada was $3.19 per ton. Mill superintendents are unwilling to verify these figures, but indicate that on the whole there has not been any very great change during the last three years; the increase in wages being possibly nearly offset by increased efficiency. The wood cost of pulp, I am informed, has increased from $1.50 to $2 per ton. The wholesale price of the different kinds of paper is as follows:

Strawboard, at mill	per ton..	$35.00– $40.00
Wood board, at mill	do....	30.00– 35.00
Box board, at mill	do....	40.00– 50.00
Kraft sheathing, at mill	do....	40.00– 45.00
Roofing and sheathing, at mill	do....	40.00– 50.00
Kraft paper	do....	75.00– 100.00
Leather board	do....	60.00
Wrapping paper	do....	45.00– 65.00
Manila paper	do....	57.00– 75.00
Hanging, delivered	do....	43.00– 44.00
News paper, at mill, in car-lot rolls	do....	39.00– 43.00
Sulphite pulp or kraft pulp, delivered in Canada	do....	38.00– 40.00
Book paper, in car lots, f. o. b	do....	55.00– 85.00
Writing paper, in car lots, f. o. b	do....	100.00– 150.00

EXPORTS OF PAPER.

The following table gives the exports of different classes of paper from Canada to Great Britain, the United States, British colonies, and other countries for fiscal years ending March 31, 1909, and 1913:

Classes of paper and countries.	1909	1913	Classes of paper and countries.	1909	1913
Wall paper:			Printing paper:		
Great Britain	$370	$155	Great Britain	$1,364,866	$202,215
United States	1,310	6,615	United States	899,801	4,242,298
British colonies	17,012	47,068	British colonies	696,821	1,126,774
Other countries	2,515	5,336	Other countries	147,886	120,839
	21,207	59,174		3,109,377	5,692,126
Felt paper:			Paper, not elsewhere specified:		
Great Britain	5,894	148	Great Britain	236,222	381,905
United States	10,596	3,240	United States	26,511	18,006
British colonies	777	34,631	British colonies	44,198	30,847
Other countries	1,231	33	Other countries	13,074	4,088
	18,497	38,062		310,995	434,846
Wrapping paper:			Total	3,469,713	6,324,810
Great Britain	40	....			
United States	5	96,922			
British colonies	592	3,555			
Other countries	....	135			
	637	100,612			

Of the total paper exports in 1909, Great Britain took 40 per cent; the entire British Empire, 68 per cent; the United States, 26 per cent; and other countries, 6 per cent. In 1913 the paper exports of Canada increased 82 per cent as compared with the year 1909. The distribution was as follows: Great Britain, 9 per cent; the British Empire, slightly over 28 per cent; the United States, 69 per cent; and other countries, 3 per cent.

IMPORTS OF PAPER.

The following table gives the value of Canadian imports of different classes of paper from Great Britain, the United States, the British colonies, and other countries for the fiscal years 1909 and 1913:

Classes of paper and countries.	1909	1913
Photographic, plain, basic, adapted for manufacture of albuminized paper:		
Great Britain	$342	$2,010
United States	41,656	86,691
Other countries	12,407	26,007
	54,405	114,708
Paper prepared for photographer's use:		
Great Britain	26,609	109,499
United States	75,305	91,468
Other countries	627	5,540
	102,541	206,507
Cardboard, not pasted or coated:		
Great Britain	4,492	8,398
United States	16,289	72,669
Other countries	190	787
	20,971	81,854
Felt board: United States	39,793	12,012
Wall paper:		
Great Britain	45,051	117,016
United States	154,819	324,622
Other countries	16,075	25,462
	215,945	467,100
Millboard, not coated or pasted:		
Great Britain	4,156	3,398
United States	46,209	95,782
Other countries	426	829
	50,791	100,009
Printing paper, n. o. p.:		
Great Britain	178,264	288,150
United States	195,580	347,066
Other countries	1,142	10,670
	374,986	645,886
Printing paper not more than 2¼ cents per pound:		
Great Britain	....	$130
United States	....	152,030
	....	152,160
Ruled and bordered and coated and boxed:		
Great Britain	$21,954	93,623
United States	61,112	179,942
Other countries	17,438	57,653
	100,504	331,218
Strawboard, not pasted or coated:		
Great Britain	1,486	553
United States	19,107	105,530
Other countries	4,645	2,188
	25,238	108.271
Tarred and other building paper:		
Great Britain	12,350	4,271
United States	281,983	684,484
Other countries	1,598	1,173
	295,931	689,928
Wrapping paper:		
Great Britain	10,366	14,866
United States	52,465	141,621
Other countries	16,382	65,051
	79,213	221,538
All kinds n. o. p.:		
Great Britain	272,248	648,510
United States	633,259	1,368,366
Other countries	134,058	315,054
	1,039,565	2,331,930

The total imports for 1909 were $3,586,768, of which $2,443,189 came from the United States and $838,790 from Great Britain. The total imports for 1913 were $8,209,579, of which $5,623,066 came from the United States and $1,806,544 from Great Britain.

In all classes of paper imports the purchases from the United States exceeded those from Great Britain, except in the paper prepared for photographers' use. In this class the imports from the United States increased only a slight amount during the five years, while there was more than threefold increase in the imports from Great Britain.

The shipping facilities give of course to paper manufacturers in the United States a great advantage over those located in other countries.

The usual terms given to paper purchasers are 2 per cent discount for payment in 30 days or 60 days net. Occasionally 3 per cent is allowed for 10 days' payment. On book papers 2 per cent is given for 10 days' payment or 1 per cent off for 30 days. The same terms are sometimes made on purchases of news print paper.

CORNWALL.

From Consul G. Russell Taggart.

There are no large users of paper in this district and no wholesale houses of any kind. Paper purchasers are limited therefore to newspaper and job-printing offices and to retail stationers and merchants. The purchases are made entirely from jobbers in Montreal, Toronto, and Ottawa. Moreover, the supply consists of very little American paper, because the United States prices plus the duty for the same grades of paper are invariably more (except when very large purchases are made) than the Canadian and British quotations. The quality, shape, and pattern of all kinds of paper used here are very much like those of the United States. Indeed a good deal of the Canadian wall paper is exactly like the American patterns; for, it is said, large American wall-paper printers exchange manufacturing rollers with Canadian concerns.

The kinds of paper used in this district are principally writing, news, wrapping, tissue, blotting, carbon paper, and cardboard.

There are two paper mills in the Cornwall consular district, one in the town of Cornwall and the other 5 miles west, at Mille Roches, Ontario. The equipment of the Cornwall mill came chiefly from the United States, while the equipment of the Mille Roches plant is principally of British manufacture. In the Cornwall mill book, litho, envelope, and fine writing papers are made, while at Mille Roches they turn out the cheaper grades of book, litho, and envelope paper. The value of the yearly output in each plant is about $600,000. The yearly wages paid for labor (a majority of which is more or less skilled in both mills) are at Cornwall about $95,000 to 200 hands and at Mille Roches $60,000 to 125.

The Cornwall paper mill uses for raw materials pulp wood, rags, and waste paper. The rags and paper come principally from the United States, the pulp wood from lower Quebec. The cost c. i. f. Cornwall is for waste paper (chiefly from New York City) 2 and 2½ cents a pound, and for rags (from the United States weaving districts) from 1 and 1½ to 6 cents a pound. The yearly purchases of paper and rags will amount to about $55,000 a year. The pulp wood for the Cornwall plant (all spruce, mostly slip-peeled, some rossed) costs $9.50 to $10 a cord of 128 cubic feet.

The Cornwall mill makes its own sulphite pulp, and last year the company made changes and built additions in its sulphite pulp process costing about $25,000. The United States supplied almost all of this material both in construction and equipment. The contractors and builders were, moreover, Americans.

The bleaching chemicals (about $9,000 a year) the Cornwall plant formerly bought from England. Recently it changed to a concern in Niagara Falls, N. Y. At the same price for chemicals, preference is given to the United States, because quicker service can be had and smaller amounts ordered at a time.

The Mille Roches paper mill has not yet diverted its expenditure of about $6,000 a year for bleaching chemicals from the British concern; but the "convenience" argument has been presented to the company, the name of the American chemical concern given them, and they have readily promised to make a comparison of the British and American prices.

Waste paper, mostly from New York City, and costing about 1¼ cents a pound—about $35,000 worth a year—is the chief raw material for the Mille Roches mill. Some sulphite pulp is also used at Mille Roches, being obtained already prepared from Hawkesbury, Ontario.

The entire product of both mills is sold in Canada The wholesale selling price, f. o. b. factory, of the product of the Cornwall plant ranges from 4½ cents a pound for No. 2 book paper made of wood pulp to 16 cents a pound for A No. 1 writing paper produced from rags. The Mille Roches product sells for 4 and 5 cents a pound.

DAWSON.

From Consul G. C. Cole.

The population of this consular district being small, there is not much paper of any kind used here. The print paper used is made in Canada, as well as all other paper, except some of the finer grades of writing paper and wall paper, which come from the United States. At least 90 per cent of all the paper used in this territory is of Canadian make and the remaining 10 per cent comes from the United States. While the American paper is preferred to the Canadian paper here, the Canadian duties are too high to justify the merchants and others to handle it.

The standard sizes in writing paper of all classes are used here and usually of the best grades. All grades of paper sell twice as high here as in the United States. There are three newspapers published in the district—one daily of four pages and two weeklies of the same size.

There is no paper or paper-making material of any kind manufactured in this district. There are vast forests of spruce in this territory suitable for paper pulp, but so far none has been used for that purpose.

The cost of transportation from the west coast to this port is excessively high on all classes of products. Paper of all kind received here, either comes through Vancouver or Seattle, from either of which ports the cost of freight is the same.

FERNIE.

From Consul Frank C. Denison.

Approximately 250,000 pounds of wrapping paper are used in this district per year, which is mostly furnished by one firm in Hull, Ontario. It is sold in rolls ranging in width from 12 to 30 inches, and is generally of the medium to cheaper grades.

Writing papers of the common sizes sold in the American markets are used, with no special requirements as to weight, quality, or finish. Very little book paper is used. From 4 to 5 tons of news paper is probably used per year in this district. Small amounts of tissue, blotting, parchment, and carbon papers are bought principally through jobbers.

No paper or pulp manufacturers are located in the district. Considerable spruce and fir, as well as some cottonwood would be available for wood pulp, but vegetable fiber and rags are not plentiful.

About 50 per cent of the writing paper used in this district is of American manufacture, but is largely bought of Canadian jobbers. There has been some importation of the cheaper grades, mostly used in school work, from Scotland.

Prices quoted are generally f. o. b. at mill, and from 60 to 90 days are given on wrapping paper, while the usual time on other papers is 30 days.

As a very small per cent of high-grade writing paper sold is of Canadian manufacture, it would seem that this section of the Dominion might well be worth attention, provided prices are such as to compete with foreign papers.

FORT ERIE.

From Consul H. J. Harvey.

There are no paper manufacturers in this part of Canada. The small dealers about here obtain their supplies from wholesale dealers in Hamilton and Toronto. There is not enough trade in this vicinity to warrant sending a man to solicit orders for the limited quantities used.

FREDERICTON.

From Consular Agent William W. Heard.

The market for paper of all classes in this section of New Brunswick is very limited. Outside of the demand for the various kinds of wrapping paper, paper bags, etc., other grades would find a market only among the following: Five printing establishments, one bookbinder and ruler, three stationery stores, and two drug stores, the latter two stores handling only paper for social correspondence. With the exception perhaps of this latter grade of paper, the larger portion of all other grades is purchased through Canadian jobbers located in the larger cities, the trade being canvassed by travelers at regular periods.

It is impossible to ascertain the quantity of paper used, as there are no statistics available, but from information obtained it would appear that quite a large quantity of American-made paper is used in this city, although very little of it is imported direct. One firm reports that their purchases of all grades of American-made paper amounts to about $1,500 a year, of which $900 is for wall paper

On the other hand, the head of the largest printing establishment states that 95 per cent of all stock used is purchased from one Canadian firm. A great deal of the American-made paper that reaches this market is watermarked with the Canadian jobbers' trade-mark or other design, thus making it difficult to ascertain its origin.

New Brunswick is widely known for its almost inexhaustable supply of pulp wood, and to the end that this may be fully utilized to the benefit of the Province in building up industries, the following law was enacted by the legislature in March, 1913:

> A license, to be known as "the pulp and paper license," which shall contain as part of its conditions, the following provisions and requirements: At least 50 per cent of the lumber cut yearly upon the said Crown lands under such license, shall be manufactured into pulp and paper, or other manufactures of pulp, within the Province of New Brunswick. That the licensee agrees, upon taking out the license, that he shall acquire or erect and operate a pulp mill within three years of the date of taking out of such license, and that he shall acquire or erect and operate a paper mill or other mill which manufactures goods into which pulp largely enters as raw material within five years from the same date, and that both the pulp and paper mill or other mill as aforesaid shall be continuous from year to year; such licenses to be renewable for a period of 30 years, and shall be subject to an extension for a period of 20 years from the termination of the 30-year period, upon the condition hereinafter provided. The renewal from year to year for the 30-year period, and the yearly renewals during the extended period of 20 years, to be subject to a satisfactory compliance on the part of the licensee with such rules and regulations as may be made from time to time by the lieutenant governor in council in dealing with the Crown lands of the Province.

The above-mentioned Crown lands aggregate a total area of 7,750,000 acres, but up to the present time only one pulp and paper license has been taken out, although there are outstanding at the present time more than 2,300 "sawmill licenses." It is thought that more of the pulp and paper licenses will be taken out when the regulations become more widely known and understood. If this is done the chance of increasing the market for American papers will be even less than at present, as the Government is using every effort to have pulp and paper mills established in the Province.

HALIFAX.

From Consul General Evan E. Young.

The classes and quality of paper in demand and use in this consular district correspond very closely to those required and used in the United States. Writing paper (all classes), book papers, news paper, manila paper, wall, tissue, manifold, wax, and blotting paper, and paper boards are all in common use. The bulk of the paper sold for social and commercial use is of medium grade, although a supply of both high and low grade papers is also carried by the retail stores.

A considerable quantity of high quality paper for social purposes is of American manufacture. The medium quality is supplied largely from Great Britain, while printing paper (flat) is obtained from Canadian mills. Approximately 50 tons of book paper, for publishing purposes, is used annually, and 20 tons of writing paper. The amount of news paper used per annum is estimated at 2,800 tons.

There are no special requirements as to quality, weight, finish, etc., peculiar to this district. Note paper for social use runs from 4½ by 5½ inches up to the larger sizes. Book paper is largely sold in two sizes, 24½ by 36½ and 28 by 42 inches. News paper comes in sheets of 24 by 36 and 34 by 48 inches; in rolls the width varies from 27 to 70 inches.

The LaHave Pulp Co. is located in Lunenburg County, this consular district. The plant is run by water power with a head of 32 feet. The machinery consists of four grinders and four wet machines. Spruce, obtained locally, is used. The plant has an output of about 32 wet tons a day, the product being shipped to England and the United States. Thirty men are employed.

The plant of the McLeod Pulp Co. (Ltd.) is located at Liverpool, Nova Scotia, and consists of two pulp mills and a cardboard mill. During the winter months some 500 men are employed. The output at present is 100 tons of pulp and 20 tons of cardboard daily. The products are shipped to England and the United States.

The equipment of these plants was imported from the United States and Great Britain, a portion, however, being obtained from Canadian manufacturers.

On ordinary paper prices usually quoted are 3 per cent 10 days or 2 per cent 30 days. On book paper the terms are 2 per cent 10 days or 1 per cent 30 days. The terms for news paper are usually 2 per cent 10 days or 30 days net.

HAMILTON.

From Consul James M. Shepard.

A very large proportion of the paper used in this district is made in Canada, the remainder being supplied from the United States, Great Britain, Germany, and Sweden. Practically all lines, from the cheapest news to superfine linen ledger papers, are in use.

No statistics of importations are kept or compiled at local customhouses, but inquiry from dealers indicates that the American makes have a long lead, notwithstanding the preferential tariff in favor of British makes.

Standard sizes are mostly used, but sometimes special sizes are required. The quality, weight, finish, etc., is practically identical with the American standard. This includes writing, news, wrapping, and tissue papers, and paper boards of all kinds. High and medium grades are in common use for social and commercial correspondence.

Canada produces wood pulp for domestic use and export, also rags and waste paper. There are no pulp mills and no paper mills of importance in this district.

Wholesale prices of local products are said to be based on prices in the American market plus the duty. The taste of the purchaser, however, governs in many lines and the cost of delivery in some. Hamilton is about 40 miles from Niagara Falls and is a port on Lake Ontario, with cheap and speedy transportation facilities by water or rail from the United States.

KINGSTON.

From Consul Felix S. S. Johnson.

In the consular district of Kingston there are only two cities with a population of more than 10,000 inhabitants, Kingston and Belleville. In the former there are two daily and one weekly newspapers and in the latter one daily and a weekly. The consumption of paper by these newspaper firms is about 500 pounds per day, and the source of the supply is from Ottawa.

Importations of American papers, such as Bristol board and bond and writing paper, are purchased through Toronto firms. The same remark applies to importations of English writing and bond papers.

The following kinds of paper are sold in this district: Writing paper, including bond, ledger, and linen, mostly English and American make; news paper, wholly Canadian; manila, mostly Canadian; carbon and blotting papers, mostly from the United States; Bristol and other boards of all kinds, from the United States and England. There is only one factory in Canada making note paper that compares favorably with that made in the United States. It is located at Windsor Mills, Province of Quebec, and its best grade of note paper sells at 25 cents per pound.

No statistics of paper importations are available at the Kingston customhouse. The trend of trade, however, in recent years has been in favor of the United States. The usual terms granted to importers are 2 per cent and 30 days.

MONCTON.

From Consul Charles Forman.

The chief source of the supply of paper for Moncton is upper Canada, the Province of Quebec furnishing most and Ontario standing next. Imports are relatively small, the United States furnishing most.

The character of the supply, by which is understood the purposes for which paper is used, is paper for newspapers, job work, commercial stationery, social correspondence, wrapping paper, and wall paper. But little book publishing is done in New Brunswick, so that paper products for that purpose are in small demand.

The American wall papers imported are the more expensive kinds, such as only a few can afford, and the better grades of paper for social correspondence. The imports in both these lines are small.

MARKET REQUIREMENTS.

About 225 tons of news print paper are annually consumed in Moncton, $15,000 worth of wall paper, and $5,000 worth of paper for social correspondence. About 125 tons of wrapping paper per year are used. Figures for job papers and other kinds are not available and estimates would be largely guess work.

Requirements as to sizes and kinds are in general similar to those in the United States, inasmuch as relations, both commercial and social, between the United States and the Province of New Brunswick are very close, and articles in general use, including paper, are practically the same in both countries.

News print paper comes in weights of 28 to 32 pounds to the ream; for duplex presses in rolls of 800 pounds each. Job papers, for printing catalogues, reports, and for commercial stationery (letter heads) are used in sizes 17 by 22, 17 by 28, and 24 by 36 inches. Boards are little used, there being few books produced. Bible and India papers are not used. The paper in general use for social and commercial correspondence is, as a rule, of medium and low grades.

HOME PRODUCTION.

Wood is the only material locally used for the manufacture of paper. The pulp is made from spruce from local timber lands.

There are two concerns engaged in the manufacture of paper and pulp in the Moncton consular district. The output of one is 4,000 tons of pulp and paper per annum; the output of the other is about 30 tons per day of 24 hours.

The efficiency of labor in the mill of the New Brunswick Pulp & Paper Co. is reported to be fair. The pay for unskilled labor is $1.80 and for skilled labor $2 to $3.50 per day of 12 hours. The sources of equipment are mostly Great Britain and Canada. The price of materials used is, for wood, rough, $5 per cord delivered; soda ash, 58 per cent, 80 cents per 100 pounds; salt cake, $14.60 per 2,000 pounds; lime, $8.50 per 2,000 pounds.

Most of the product is disposed of in Canada, chiefly in Montreal, Toronto, and Winnipeg. Moncton buys about 60 tons a year from this mill. The product of the concern is "genuine pure kraft wrapping paper, machine finished and machine glazed, in natural brown and other colors." The plant has been idle lately for lack of orders, but this condition is probably only temporary.

Wall paper costs from 3 cents to $1 per roll at the mill for the cheaper grades, which are produced in Canada. Freight from Toronto is 48 cents per 100 pounds. The better kinds of wall paper, which are American made, cost 15 cents to $12.50 a roll, including Canadian duty. The freight from Buffalo to Moncton is 56 cents per 100 pounds.

Job papers, including bond papers, cost at the mill from 5 to 20 cents a pound, book papers 5 and 6 cents, bond 7½ to 20 cents. Freight from Montreal to Moncton is 46 cents per 100 pounds, from Toronto 54 cents. In carload lots the freight would be the same as for news print (see below).

Carbon paper, chiefly American, costs, delivered at Moncton, 75 cents to $2.25 per 100 sheets. Tissue and blotting paper (English) costs 75 cents to $1.20 per pound and 8 cents per pound, respectively. Bond typewriting paper costs 50 cents to $1 per ream; ivory note, 45 cents per ream; parchment, $1.25 per ream; linen, $1 per ream. These prices are for paper laid down in Moncton. The box and quire papers are chiefly American. Tablets are chiefly Canadian. Some of the correspondence (social) paper sold by the pound in Moncton is English.

News print paper costs at the mill 2 to 2¼ cents per pound. Freight on news print paper in carload lots to Moncton from Montreal is 27 cents per 100 pounds, from Toronto 32 cents, and from Hull, Province of Quebec, 28 cents per 100 pounds. Most of the news print used in Moncton comes from Hull.

The prices of wrapping paper are: No. 2 manila, 3¼ cents per pound; brown and Cleaver papers, $2.85 per 100 pounds. These are from the Province of Ontario and from Montreal. Kraft paper from the Millerton, New Brunswick, mill above mentioned, costs 3¾ cents per pound. The above prices are for wrapping paper delivered in Moncton. The average price of the Millerton paper is 3½ cents per pound. In large quantities it has been sold at $0.032 and $0.034, and has been sold, delivered in Chicago, at $3.75 and $3.50 per 100 pounds, the freight, 31 cents per 100 pounds, being included in the price.

Exports of wrapping paper, the only kind locally manufactured, to the United States, as shown by the declared export returns from the consular agency at Newcastle, New Brunswick, were $1,451 in 1912 and $29,645 in 1913. It is not expected that these exports to the United States will be continued in the future, and the product will be wholly marketed in Canada, chiefly in Montreal, Toronto, and Winnipeg.

IMPORT TRADE.

The principal imports of paper are from the United States, but so far as entries at the Moncton customhouse are concerned, the value of paper imported from the United States was so small in comparison with the values of other articles that it did not appear in the list of imports for 1911 and 1912. In 1912 manufactures of paper from the United Kingdom imported at Moncton were valued at $878 as against none in 1911. There have been no important changes in the trend of the import trade or in the sources of supply in recent years.

The shipping facilities are very good. The Canadian laws prevent cutting or "slaughtering" of prices. There has been an improvement in shipping facilities by rail and water in recent years, but the duty has been the determining factor in excluding American competition, except as above indicated. It may be possible, however, on account of the close business relations between New Brunswick and the United States to sell more job papers in Moncton as well as to hold and extend the trade in wall paper, social correspondence paper, and typewriter and carbon paper. But with the tendency of Canadian factories to improve their products, the source of supply will be likely to become more exclusively Canadian, at least under present tariff conditions.

The terms of sale for news print paper are usually from 2 to 3 per cent discount for cash in 30 days; for job papers the same. A discount of 4 per cent is made on wall paper for payment in 10 days, while wrapping paper is sold for net cash in 30 days and is priced by the 100 pounds. On other kinds the terms are usually net cash in 30 days.

MONTREAL.

From Consul General Wm. Harrison Bradley.

There are no statistics available as to amount of the various kinds of paper used in this city and district. All kinds are in demand, as they would be in a city of the same size across the boundary line in our own country. The standard sizes are the same as used in the United States.

The paper in general use is of medium class, but more high-class paper is used as the wealth of the country grows. The United States, the dealers here say, leads the world in quality and price of ledger, bond, blotting paper, and playing cards, but the tariff, which prevents the greater importation of American paper, prevents a larger importation of cards, which pay only 5½ cents a pack coming from

England, but must pay 8.6 cents a pack if brought from the United States.

Pulp wood is the material most used in mills in this district. The cost of production varies only with local causes and the management of the corporation, as the larger mills control their own timber limits.

The mills report that their machinery is largely imported from the United States, and the skilled work is, at least for the first years of a mill's existence, done by men trained in the United States. Gradually men of the locality are superseding these, but, I am informed, rarely equal them in skill and responsibility. There are no paper mills in this city of 500,000 people; probably the nearest large mill is some 30 or 40 miles away.

A large amount of paper is imported from England and Sweden. Freights from these countries during navigation months are about half what they are from the United States, even from New York—about 19 cents from Sweden and 39 cents from New York were rates given me. The English mills now make American standard sizes for the Canadian market. Their terms are 5 per cent off for cash in 40 days, but they are willing to allow credit up to at least six months if desired. All paper bought in Sweden for this market is paid for at once by draft against bill of lading.

The use of United States standard sizes indicates that we once held the market for general papers here, as we do still for specialties. Dealers say that they would much prefer to buy frequently in the United States with quick delivery, so turning over their capital more often, but that tariff and preference had made it worth their while to buy from abroad much that they formerly bought from the United States.

OWEN SOUND.

From Consul North Winship.

There is no paper manufactured in or exported from this district, and by far the greater part of the imports are of Canadian origin, especially the news paper, wrapping, general printing, and writing paper, the latter being of medium and low grades. Linen writing paper is the kind preferred and a medium quality is generally used.

The United States comes second, and Great Britain third in supplying this market with paper. The United States furnishes a good percentage of the fancy stock, including fine cover papers, fine cardboard stock, fine tissues, fine carbons, and fine writing and ledger stock.

The amount of note and letter paper used in this district each year is estimated at 500,000 envelopes and 1,000 reams of paper.

About 200 tons of standard size news paper is imported yearly into this district from Canadian factories. The common sizes and weights are 35 by 44 inches, 60 pounds to a ream, and 36 by 48 inches, 70 pounds to a ream.

The imports of paper from the United States have decreased gradually during the last few years, not, however, on account of inferior quality or unsatisfactory terms of credit, but because more paper is being made in Canada than formerly and the manufacturers are improving the grade of their output.

QUEBEC.

From Consul G. Willrich.

The paper consumed in this district is obtained from Canadian, English, and American sources. There are a number of first-class paper-manufacturing establishments in this district, principally for the manufacture of news print, which not only supply the home demand in this line but export large quantities to the United States. These exports have increased rapidly since 1910, when their total value aggregated $173,561, increasing in 1911 to $211,616, in 1912 to $270,000, and in 1913 to $1,059,597. The enlargement of the existing mills, and the completion, late in 1913, of a new mill, which has started to manufacture news print this year and is now shipping at the rate of about 50 tons daily, still further augments the volume of these exports.

The comparatively limited demand for news print in this district, which has no great daily newspapers, is readily supplied by local mills, excluding the idea of any news print imports from abroad, even were these not subject to an import duty of 15 per cent, which renders competition in that line out of the question.

The total value of all classes of paper consumed in this district has been placed at $500,000 per annum, and the kinds of paper most used are to all intents and purposes identical with those used in the United States, in fact, American standard sizes govern in this district.

Aside from the Canadian paper products, there is an increasing demand for fine English linen papers, which has been stimulated to a large extent by the activity of English paper houses, who formerly depended on their catalogues to sell their goods but now send over competent salesmen, carrying full and attractive lines of samples, from which local buyers are able to make their selections. As these British goods enjoy the benefit of the preferential tariff, which constitutes an advantage of from 2½ to 5 per cent of the selling price, besides being considered by the local trade of the highest character as to quality and finish, it is but natural that a large share of the paper trade of this district has been captured by the British manufacturers. American manufacturers, however, are given credit for putting up their wares in the most attractive boxes, which to some extent offsets any fancied or real inferiority of their contents.

According to the Pulp and Paper Directory of Canada and the latest issue of the Pulp and Paper Magazine of Canada, there are located in this consular district 15 pulp mills, of which 13 make ground wood pulp, 2 kraft pulp, and 2 sulphite fiber; and 9 paper mills, of which number 1 mill is engaged in the manufacture of bags, 3 building and sheathing box board, 2 card specialties, 1 carpet lining, 3 felts, 1 kraft, eight news print, 3 roofing, 1 strawboard, 1 tag board, 2 wood board, and 4 wrapping paper. The equipment of nearly all of the mills enumerated is of American make, though in one or two instances English machinery has been installed.

It has not been possible to get detailed statements of the cost and efficiency of labor and mills, but it is not probable that there has been a material change in this respect since exhaustive data on that subject were obtained by special experts sent to this Province about two years ago by the United States Tariff Board.

WHOLESALE PRICES.

The wholesale prices of the principal local pulp and paper products, for export f. o. b. the several ports of shipment in this district, are as follows:

Book and news paper.—Roll news, $40 to $43 per ton for large orders, $45 to $50 for small orders; ream news, $45 to $47 per ton for large orders, $50 to $60 for small orders; No. 1 book, 5½ to 6 cents per pound; No. 2 book, super calendered, $4.50 to $4.75 in large quantities, $4.75 to $5.50 in small quantities; No. 3 book, machine finished, $4 to $4.25 in large quantities, $4.40 to $4.50 in small quantities.

Writing paper, 5 to 7½ cents per pound; sulphite bond, 6½ to 8½ cents per pound.

Wrapping paper.—Gray brown, per 100 pounds, car lots, $2.25 net; 5 tons, $2.45; 2 tons, $2.55; 1 ton, $2.65; less, $2.75; red brown, car lots, $2.85; 5 tons, $2.95; 2 tons, $3.05; 1 ton, $3.15; less, $3.25; B manila, car lots, $2.85; 5 tons, $2.95; 2 tons, $3.05; 1 ton, $3.15; less, $3.25; No. 2 manila, car lots, $3.10; 5 tons, $3.20; 2 tons, $3.30; 1 ton, $3.40; less, $3.50; No. 1 manila, car lots, $3.25; 5 tons, $3.45; 2 tons, $3.55; 1 ton, $3.65; less, $3.75; kraft, $3.75 to $5; fiber, car lots, $3.25; 5 tons, $3.45; 2 tons, $3.55; 1 ton, $3.65; less, $3.75.

Most of the manufacturers are quoting 10 per cent less than the above prices to the jobbing trade on cheaper lines of wrapping paper such as B manila, No. 2 manila, gray and red browns.

Pulp.—Sulphite, easy bleaching, $43 to $45 per ton; news quality, $41 to $42 per ton; bleached sulphite, $54 to $59 per ton; kraft pulp, $3.60 to $4 per ton; ground wood, No. 1, $15 to $16 per ton; ground wood No. 2, $22 to $24 per ton delivered United States.

The wholesale prices of imported paper products in this district are as follows: Bond finish, 9 cents per pound; linen, 12 cents per pound; crash, 13 cents per pound; manila wrapping, 2½ cents per pound.

RIMOUSKI.

From Consul Frederick M. Ryder.

There is only one printing office between Riviere-du-Loup and Campbellton, New Brunswick, a distance of almost 200 miles, and this is located at Rimouski. Although the office is never overcrowded with work, it is kept busy most of the time with miscellaneous printing required by two fire insurance companies, three bishoprics, two colleges, and several convents.

The paper in greatest demand for this particular class of work is an ordinary bond, made to order by a mill near Montreal; two sizes are utilized, 17 by 22 inches, 16 and 20 pounds to the ream, and 17 by 28 inches, 20 to 24 pounds; the price is 8 cents f. o. b. Montreal. This grade of bond is used for all outside commercial work, being ruled and cut into letter and note heads, billheads, etc., at the office.

The demand for news paper is limited to the small circulations of three weekly publications, there being no daily paper printed in this district. The prevailing size of news print is 24 by 36 inches, 35 pounds, costing 2¾ cents a pound; it is made at Grand Mere, Quebec. The amount of book paper consumed is insignificant, there being little demand for books or pamphlets of any kind.

A considerable quantity of blotting paper is used for printing advertising blotters for insurance companies. This comes in the regular size, 19 by 24 inches, 100, 120, and 140 pounds, and costs about 10 cents a pound in 10-ream lots.

A large quantity of parchment paper is used for lining butter tubs and boxes; this is furnished in standard sizes for 30, 50, and 70 pound tubs, circles being cut for tops and bottoms, the sides complete in one piece, at $8.40, $10 and $12.40, respectively. For butter boxes, the paper is cut to fit in three sizes, at $10, $11.60 and $14.40 per thousand, complete. A lot of paraffin paper is also used for wrapping pound packages of butter.

Manila papers are used to some extent for wrapping goods in many of the stores, but a number of the merchants buy old newspapers for this purpose. Manila is furnished flat or in rolls of various widths and costs 2½ to 3 cents a pound.

Bristol board is used in considerable quantities for calendars and show cards; a fair grade of white is required for this work, 22½ by 28½ inches, 120 and 140 pounds to the hundred sheets, costing from $10 to $15 a hundred.

The grade of writing paper put up in boxes and sold in stationery and fancy goods stores, for social correspondence, is very ordinary and much more expensive than finer grades sold in American department stores.

ST. JOHN.

From Consul Henry S. Culver.

The character, style, and quality of all articles on the Canadian market are similar to those in the United States—that is, they are distinctly more American than foreign, and in the commodity of paper this is especially true. The general trend is to styles familiar to every American.

Canadians purchase goods of their own manufacture principally when cost, quality, and styles are equal, but this field is as yet too limited for Canada to produce everything that the market demands; hence, for high-class or fancy papers she must go abroad, and naturally she turns more especially to the United States for what she needs. Her orders are more speedily filled from there.

There are four pulp mills in this Province, but only one mill engaged in the manufacture of pulp and paper combined, and here the only quality of paper manufactured is sulphate fiber of the kraft wrapping variety.

MARKET REQUIREMENTS.

This market is little different from those in the United States. As to the general demand, bond papers, both high and low grades, linens and ledgers, book paper, and Bristol board of all weights and sizes are on the market. In fact, one will find all the grades and sizes used in the majority of cities in the United States.

The three daily papers in this city draw their supply from Ontario and Quebec, but, owing to the fact that the paper is manufactured in a dry climate, after it is printed in this damp climate and sent out, the sheets, after two to three hours' exposure, become limp and soggy. The paper manufactured in Maine is better suited to their needs, owing to the climatic conditions being about the same. However, the duty and freight into Canada preclude importation from the United States. The total yearly consumption of these papers is 1,268 tons, in rolls, and costs 2¼ cents per pound.

Commercial and social stationery in general use is of rather good grade. Handmade linens, high-grade bonds, and linen-finished papers find a ready sale.

A very small quantity of rags and other material is supplied from this Province, the greater part being shipped to the United States.

The statistics of exports from this port for the year ending December 31, 1913, show that there was shipped old rope to the value of $16,078; old bags, cut, $2,062; old sails, $250; paper stock, $148.

IMPORT TRADE.

The prices of local and imported products are about the same, and range as follows: Bond papers from 6 to 20 cents per pound, the 6-cent bond being mostly of Canadian manufacture, that from 7 to 20 cents either American or British, mostly American; linen and linen ledgers, 6 to 30 cents per pound; manila and kraft wrapping paper, 3½ to 5 cents. Tissue, wax, parchment, and fancy colored papers of light weight are of American, German, or Italian manufacture. Tissue is imported from the United States and Italy, while wax, parchment, and colored papers come from Germany. The price of tissue is 10 to 12 cents per pound, basis 6 pounds to the ream of 18 by 23 inches; wax and parchment papers sell for 8 to 12 cents.

Manila tissue is also imported from the United States, costing from 8 to 10 cents per pound. Blotting paper is not made in Canada, the total supply coming from the United States and Great Britain, and costs from 8 to 10 cents per pound. Straw and box board is manufactured in Canada and costs $43 to $56 per ton in carload lots, f. o. b. mill. Pressboard, binders, and Bristol board are imported from the United States and Great Britain, ranging in price from $0.70 to $6 per 100 sheets.

TREND OF TRADE.

The general trend of the import trade is toward the United States market. However, the trade is jealously guarding home industries when price and quality will permit them to do so, but as yet the mills of Canada are not making the very high-grade papers, owing to the comparatively limited market. The nearness of the United States markets is an important factor in influencing the trend of trade in that direction, and also the facilities for both rail and water transportation are great factors to be considered.

Prices are quoted to importers at the price current in the home market plus the duty and freight, these being figured in the total price, with an extra advantage of a discount of 2 to 5 per cent in 30 days and net amount in 60 days. No other advantage or inducement is offered.

ST. STEPHEN.

From Consul Charles A. McCullough.

The bulk of the paper used here for ordinary purposes, such as writing paper, wrapping paper, and news paper, is of Canadian manufacture, some special papers being imported from the United States, Great Britain, France, and Germany. There probably would not be much opportunity to work up a market here for ordinary papers of American make, as the raw material in Canada is so abundant and the facilities for manufacturing are so good.

The largest item of paper used here is wrapping paper. It is mainly put up in rolls in widths of 15, 18, 24, and 30 inches, the 15 and 24 inch being mostly used. There are about 75 tons of this used in a year, the wholesale prices per pound being for kraft paper

4½ cents, for manila 3 cents, and for gray-brown 2¾ cents. In addition to this there is a market for about 25 tons heavy wrapping paper, size 38 by 46 inches, 165 pounds, at 4½ cents; a few tons of light brown, 25 by 40 inches, 50 pounds, at 2.35 cents; and about 10 tons 20 inches wide, 0.01 inch thick, in rolls, used for making tubes, price 5½ cents.

Of news paper there are 40 to 45 tons used, at a cost of 2¾ cents per pound. This is mostly 35 by 48½ inches, 70 pounds to a ream. There are about 100 reams of bond paper used, in sizes 17 by 22 and 17 by 28 inches. Of book paper, about 650 reams are used, at 3¾ cents per pound. A paper-box factory here uses some book paper, litho finish, of American make, at 6½ cents per pound. About 50 reams of cover paper are used. A limited quantity of parchment paper is used, in size 9 by 12 inches, at a cost of 32 cents per ream.

A soap-manufacturing company here uses annually 18,000,000 glazed wrappers in red and yellow, size 5½ by 6½ inches, at a cost of 89 cents per thousand, printed, and also 18,000,000 sheets of waxed paper, size 4½ by 6 inches, at 7 cents per ream. They also use about a half ton of strawboard.

The paper-box company, previously mentioned, uses 40 tons light card middles, 140 sheets to 100 pounds, costing $55 per ton; 200 tons plain wood board, costing $38 per ton; 50 tons lined news board from the United States, at $52; 5 tons gummed kraft paper from England, for staying corners, at 9¾ cents per pound; 600 reams manila tissue, 20 by 30 inches, of German make, at 45 cents per ream; 500 reams Pergamyn parchment, 30 by 40 inches, German, at $2.10; 500 reams glazed friction finish, 20 by 30 inches, German, at $1.95; 130 reams leatherette, 20 by 25 inches, German, at $6; 20 reams high-art paper, 20 by 24 inches, French and German make, at an average of 18 cents per sheet. There are also used 1,500 reams of wax paper of Canadian make, 14 by 18 inches, at 42 and 70 cents per ream.

The paper used for social and commercial correspondence is of medium grade, some of it coming from the United States.

Wood for pulp and paper is abundant in this district and forms a considerable article of export. There is one pulp mill in this district the output of which is exported to the United States to be further manufactured there by the same company. The declared exports of this mill for 1913 amounted to 5,255 tons.

There is no manufacture of paper here and no export of same.

SARNIA.

From Consul Fred C. Slater.

There is no manufacture of paper within this consular district. The local merchants obtain their paper largely from jobbing houses at Toronto and occasionally from those at Montreal. Wall paper generally comes from houses at Toronto and Montreal, the better grades of which are imported from Germany and England. Wall-paper dealers say that occasionally they import from the United States for the principal reason that they desire to keep on hand the styles prevalent there.

Most of the wrapping paper comes from St. Catharines or from Toronto. As to stationery, most of this is ordered from jobbing houses in Toronto. However, stationers often import some of the better grades from the United States.

The high duty of 32½ to 42½ per cent is the chief barrier against American paper and is the cause of a great many American industries establishing branch factories on the Canadian side.

SAULT STE. MARIE.

From Consul George W. Shotts.

There are no large users of paper in this consular district. Importations are in small lots, consisting chiefly of high-class products and specialties, usually purchased through importing houses in Toronto and Montreal, and practically all from the United States.

There are two firms in this district manufacturing pulp and news print paper, one located in this city and the other with mills at Espanola and Sturgeon Falls, Ontario. The mill at Sturgeon Falls has an average daily capacity of about 40 net tons each of ground wood pulp and sulphite pulp and 60 tons of news print paper; the mill at Espanola has an average daily capacity of about 150 tons of ground wood pulp and 160 tons of news print paper; the mill at Sault Ste. Marie has an average daily capacity of about 75 tons of sulphite pulp, 160 tons of ground wood pulp, and 225 tons of news print paper; the combined daily output being about 115 tons of sulphite pulp, 350 tons of ground wood pulp, and 445 tons of news print paper. All the pulp and paper-making machinery used in these mills was purchased in the United States.

The concession granted to the Sturgeon Falls mill by the Province of Ontario conveys the exclusive right to cut pulp wood on all waters tributary, including the Sturgeon River and branches; besides this they have a monopoly of all pulp wood on private lands within this territory, amounting, probably, to 1,000 square miles of forest.

The grant to the Spanish River mill at Espanola was for 60 square miles, and also the exclusive right to all the pulp wood within 5 miles on each side of the Spanish River and branches. This is a long river with inland lakes, and the territory reserved would probably amount to over 2,500 square miles.

The mill located in this city has the right to all the pulp wood on the lands granted to the Algoma Central Railway, amounting to 3,300 square miles. Besides these special grants, at each mill there is a large surrounding independent territory from which they can cut raw material.

COSTS OF NEWS PAPER.

The cost of manufacture of news print paper at the mill here is about $29 per ton of 2,000 pounds; at the Espanola mill it is about $27.75 per ton. The wholesale price of news print paper at the present time is $42 per net ton of 2,000 pounds and for ground wood pulp it is $17 per net ton of 2,000 pounds at the mills. Government figures as published show that the highest cost of manufacturing a ton of news print paper in Canada in 1912 was $30.18 and that the average price was $27.53. The mill here is comparatively new, and the manager informs me that they are gradually cutting down the price of manufacture and he thinks it will be reduced to about $27 or less per ton.

A few months ago action was taken for placing all the mills in this district under one control but continuing to operate under the original company names. The daily average output of the combination will be about 445 tons of news print paper, or nearly 30 per cent of the entire present daily output of Canada. The combination controls the raw material in a territory amounting to over 6,800 square miles, an area about equal to that of the States of Connecticut and Delaware, but occasional small portions of this area contain little or no pulp wood. About 95 per cent of the output of this combination is exported to the United States, or about 40 per cent of the entire present export of news print paper from Canada to the United States, the balance being sold in Canada.

The cost of labor in the pulp and paper mills of this consular district is about the same as in the United States.

Competition was quite active before the combination. The mill at Espanola shipped large amounts through this port to States west, and the mill here shipped to the Eastern States through various ports as far east as Richford, Vt.; but since the combination no news print paper comes from Espanola through this port and none from the mill here goes through eastern ports.

It is estimated by paper manufacturers and also by the Government that paper mills now completed will make a daily average of about 1,600 net tons of news print paper, and that the export from Canada to the United States is about 1,000 net tons per day at the present time. Various mills in Canada are increasing their output of chemical pulp with a view to manufacturing book, bond, writing, machine-glazed, beaver board, and other high-class products.

SHERBROOKE.

From Consul Charles N. Daniels.

The consular district of Sherbrooke does not offer a very encouraging market for the sale of American-made paper products.

Pulp wood and wood pulp are largely produced and exported.

Thirty-five to fifty per cent of the paper used in the city and district comes from the United States, but, with the exception of news print paper, it is purchased from jobbers in Montreal or Toronto.

There are two mills manufacturing news paper in the district, and owing to the comparatively short haul for the product of these mills, the prospect of increasing the sale of American-made paper is not promising.

SYDNEY.

From Consul Chas. M. Freeman.

During the last six years the direct trade in paper between the United States and Cape Breton, especially the eastern end of the island, has gradually been growing, and no reason can be seen why this trade should not be increased. Diligent inquiry has failed to bring to light the visit of but a single American representative selling any of the various lines of paper to Cape Breton; this one handled wall paper.

There is not in all the district a manufacturer or wholesale dealer of paper, but commercial salesmen, representing Canadian manufacturers and jobbers, are often here, showing that the business is sufficient to give a profit over and above the expenses of the traveling salesman.

A number of years ago a wholesale paper business was established in Sydney by a limited-stock company with a capital of $15,000, which did an annual business of over $50,000. A fire made heavy losses not covered by insurance and the stockholders voted to close the business. The manager, now established in other business, believes there is at the present time an even better opening for the wholesale paper business than ever. This apparent opening, considered in connection with the paper salesmen representing but a small part of the paper business, leads to the idea that an American commercial salesman handling the different lines might find a good opening in Cape Breton, with headquarters at Sydney.

As showing the gradual increase in the value of paper and manufactures thereof coming from the United States to Sydney, duty was collected on goods valued at $452 in 1908; in 1909 the imports amounted to $843; in 1910 this had increased to $2,315; in 1911 the value was $2,330; in 1912 it was $2,705; and in 1913 the direct imports from the United States were valued at $3,795, an increase of 800 per cent in the last six years. The average importation of printed books, not included in the above, has been during the same period $3,400 per year, and has not varied greatly from year to year.

Wall paper is the one line in the paper business showing the largest gain. It is doubtful if over $50 worth was imported direct from the United States in 1908, while in the calendar year ended December 31, 1913, wall paper to the value of $1,320 was sent from the United States direct to Sydney, and indications are that even larger values will be received this year (1914). American wall paper is attractive in style, quality, and price and its increased sale has been the direct result of those attractions being presented to the buyers of the district by the manufacturers' salesman. The principal distributing centers in Canada from which Cape Breton secures its supplies of paper are Montreal, Toronto, and Halifax.

TORONTO.

From Consul Julius D. Dreher.

Owing to the abundance of wood pulp and water power, the Canadian paper mills are able to supply at a low cost almost all the paper for printing newspapers in the Dominion, the greater part of the cheaper grades of book, cover, envelope, bond, and writing papers, and nearly all of the wrapping and blotting paper, as well as boards of all kinds, except the finest Bristol board. Importations of paper into this consular district are chiefly from the United States and, to a much less extent, from Great Britain. The growth of American imports of paper seems to indicate that the trade may be still further increased.

It is impossible to state the amounts of each kind of paper used in this consular district, but the kinds most in demand are the grades used by the six Toronto dailies and the numerous weekly and monthly journals published in the city. There is also a large consumption of book, writing, bond, envelope, and wrapping papers.

The standard sizes, quality, weight, and finish of papers are practically the same as in the United States, and there are no requirements peculiar to this consular district. One reason for the increasing demand for American papers is the fact that the sizes, quality, weight, and finish of these papers conform to the requirements of Canadian consumers. The paper most in use for social and commercial correspondence is of medium grade, though in a city the size of Toronto a good deal of paper of a high grade is used.

The imports of paper from the United States for the fiscal year 1912–13 were 37 per cent larger than in the previous year and imports at Toronto from all countries showed a gain of 33 per cent. From these figures it appears that American trade in paper in this consular district is making gratifying progress. While the United States gained 37 per cent in imports of paper into the Dominion in the fiscal year 1912–13 Great Britain's gain was only 12 per cent. The increasing trade from the United States may be accounted for in part by the quality of the products and in a large measure by the adaptation of these products to the wants of Canadian consumers of paper; at least these appear to be the reasons for the increased importations into this consular district. American paper manufacturers have the advantage of proximity to the Canadian market, while the British exporters of paper profit by the preferential tariff in favor of the United Kingdom.

Local dealers quote prices f. o. b. with 2 per cent off 30 days for cash; American exporters allow 3 per cent discount for cash or 30 days net. Credit is extended for 60 days on some sales.

VANCOUVER.

From Consul General R. E. Mansfield.

The character and varieties of paper used in British Columbia are practically the same as those in use in the United States.

Favorable features of the market in this consular district for the sale of American paper products, other than news print, are: A large American population; similarity of tastes of Canadians and Americans; nearness of supply to this market; more up-to-date methods of manufacture; newer ideas in novelties, specialties, etc., in the United States than in other countries supplying the local market.

Conditions operating against the sale of American products in Canada are: The British population is not only accustomed to English products, but endeavors to assist in and promote the sale of English manufactures; difference of from 7½ to 17½ per cent between the British preferential and the general tariff schedules (covering American products); 2½ per cent difference between the general tariff and the intermediate tariff (covering manufactures from Austria, France, etc.).

There is no sale in British Columbia for American news print, as the mills in the Province supply the local market.

It is impossible to give figures covering the amount of paper of different kinds used in the district, as no record is kept or statistics furnished concerning imports into the Province.

The market conditions and requirements of this district are practically identical with those in the United States.

Writing papers, including bond, ledger, and linen papers, are prin-
y from Canada, England, and the United States; book papers,
ng Bible and India papers, etc., principally from England;
per is manufactured locally for the most part, a small portion

coming from eastern Canada; wrapping paper, etc., is also manufactured to a great extent locally. Tissue, blotting, cover, cloth-lined, parchment, wax, and carbon papers are supplied as follows: Tissue, from Belgium and Sweden; blotting papers, from the United States and Holland; carbon papers, from the United States, Canada, England, and various other sources; boards of all kinds, including strawboard, boxboard, pressboard, Bristol board, etc., from various sources, including England, Sweden, Japan, the United States, Canada, France, Germany, Belgium, Holland, etc. The majority of social and commercial paper used is of a medium grade.

HOME PRODUCTION.

The available raw material for the manufacture of paper in British Columbia is wood, including spruce, hemlock, and larch, the higher grade sulphite being manufactured from spruce. The cost of chemical wood pulp is about $20 per ton and mechanical pulp approximately $15 per ton The logs cost $8 per 1,000 in the water at the mill.

Mills in British Columbia.—There are two paper mills in operation in this district, at Powell River, British Columbia, and at Sapperton, British Columbia.

The Powell River plant has a capacity of from 50,000 to 75,000 tons annually of news print paper, and the company has plans for increasing the capacity of the mill as soon as the demand for its product warrants the improvement. This plant is one of the most modern and up-to-date of its kind on the continent, being equipped with latest improved machinery for the manufacture of paper.

The principal output of the Powell River Co. is disposed of as follows: A small portion, consisting mostly of samples, goes to Australia and New Zealand, about 25 per cent is consumed in the Provinces of British Columbia and Alberta, and the remainder exported to the United States, including 100 tons annually to Manila, via San Francisco. This company supplies about 75 per cent of the demand in the markets of British Columbia and Alberta.

The equipment of the Powell River Go.'s plant was purchased: Grindstones, England and the United States; paper-making machines, United States; pulp grinders and boilers, Canada; electric equipment, United States; hydraulic equipment, United States. The supplies are purchased: Alum, rosin, and soda ash, United States; sulphur, Japan; aniline dyes, Germany; fuel oil, United States; limestone, British Columbia; lubricating oil, United States, and some from raw material refined locally.

The Sapperton mill has a plant for the manufacture of building and wrapping paper, with a capacity of 5,000 tons a year. Most of the products of this company are marketed in Canada, the majority being disposed of in British Columbia.

Ocean Falls mills.—In 1912 the Ocean Falls Co. constructed a plant on the north coast of British Columbia for the manufacture of pulp, at a cost of $2,000,000 and with a daily capacity of 150 tons of mechanical pulp. The company went into the hands of a receiver before beginning operations and is now in liquidation, with the prospect of a sale of the plant to a company in the United States which will operate it, though there is so far nothing definite in the proposed disposition of the property, which includes a sawmill, hydraulic plant, and a pulp-grinding mill.

The origin of the equipment of the plant is as follows: Grindstones from England; pulp grinders and electrical machinery from Canada; hydraulic turbines, wet machines, and screens from Norway; hydraulic presses from England.

British Columbia Sulphite Fiber Co.—The British Columbia Sulphite Fiber Co. has a plant at Mill Creek on Howe Sound, near Vancouver, with a daily capacity of about 75 tons. The present output of the plant is about 15,000 tons a year, about one-half of which is exported to the United States and the remainder to Japan. The principal part of the timber used in this plant is brought down the coast for a distance of from 100 to 200 miles. The company reports the labor conditions in the Province unfavorable for the business, as they have to depend largely upon inexperienced hands.

The equipment of the British Columbia Sulphite Fiber Co.'s plant was purchased as follows: Boilers and electrical equipment principally from Canada; hydraulic and other machinery from Germany. Supplies of sulphur come from Japan; fuel oil from California (now using waste wood almost entirely for fuel, but plant originally equipped for fuel oil); limestone from British Columbia (company's own quarry); lubricating oil from the United States and Canada.

COST OF PRODUCTION.

White labor only is employed in the British Columbia pulp and paper mills. Common laborers receive from 25 to 27½ cents per hour for a 10-hour day and skilled labor 50 to 75 cents an hour.

The following statistics concerning the cost of production of paper, pulp, and fiber in this district are furnished by a local engineer:

> It requires from 1 to 1¼ cords of spruce wood to produce 1 ton of mechanical pulp, and about 60 to 80 horsepower for 24 hours to grind it, or nearly 100 horsepower per ton of output to drive all machinery for the plant. Water power is the only feasible source. Steam is not required except for heating the buildings.
>
> To produce a ton of sulphite fiber requires from 1.75 to 2 cords of wood, about 250 pounds of sulphur, about 300 pounds of lime-ore limestone, and about 1 ton of coal or its equivalent in mill refuse.
>
> To produce a ton of fiber with the soda process requires about 2.5 cords of wood, 200 to 250 pounds of 58 per cent ammonia soda ash, from 700 to 800 pounds of lime, and about 2.5 tons of coal or its equivalent. The sulphite process is similar to that of soda, the main difference being that salt cake or crude sulphite of soda is used.
>
> It requires approximately 1.5 cords of wood to produce 1 ton of news paper.

European shipments are allowed 60 to 100 days' credit and eastern shipments 60 to 90 days.

YARMOUTH.

From Consul Alfred J. Fleming.

Yarmouth is a small town of about 6,000 population and the consumption of paper of all kinds is not very great. There are two semiweekly newspapers, one weekly newspaper, and a very small daily, and these practically consume all the print paper used. It is estimated by them at about 16 tons per year, the size being 40 by 44 inches and the average price 4 to 4½ cents. These four newspapers do a general job printing business, practically local supply, and two of them do a general bookbinding business.

Printing, book, blotting, wrapping, and job-printing supplies are shipped into Yarmouth from Montreal, St. John, and Hull, Canada. Not a great deal of paper comes from the United States, perhaps only about 10 per cent. Coated book paper comes from the United States, but is a negligible quantity. Some of the better class of bond papers are from the United States, mostly indirect importation, through Canadian jobbers.

Local dealers say that the market is growing and that a number of special grades are sought in the United States. In a word, a better outlook for trade is apparent. Shipping facilities are exceptionally good from Boston to Yarmouth.

NEWFOUNDLAND.

From Consul James S. Benedict, St. Johns.

The extensive paper and pulp mills at Grand Falls, Newfoundland, supply the paper which is used in this colony for printing the daily and weekly papers, and also supply sheathing and wrapping paper for local use. Other sources of supply are Canada, United States, United Kingdom, and Germany. The kinds of paper in general use are kraft, grease-proof, vegetable parchment, onion skin, and common sulphite wrapper.

Comparatively very little wrapping and print paper are now imported, the supply coming from the local mills. In the better class of paper, krafts and fibers are mostly in demand, which are all imported. Grease-proof and vegetable parchments are all imported from Germany. Common sulphite in heavy, and "M. G. Nature" in thin, are principally in demand. Inboards, straw and box, are particularly in use.

Imports of writing, wrapping, tarred, and toilet papers, ink, pencils, and pens for the year ended June 30, 1913, were as follows: United Kingdom, $31,904; Canada, $52,538; United States, $44,592; Germany, $621; total, $129,655. The imports of paper hangings and borderings for the same period were as follows: United Kingdom, $16,972; Canada, $7,170; United States, $4,975; total, $29,117.

GRAND FALLS DEVELOPMENT.

There are two paper and pulp mills in this district—the Anglo-Newfoundland Development Co., having what is said to be the largest plant in the world, at Grand Falls, and the Albert Reed Co. at Bishops Falls. The area of timberland taken over by the company at Grand Falls is over 3,000 square miles, and the thoroughly modern and finely equipped pulp and paper mills have supplied all the paper for the London Daily Mail and London Times since 1910, as well as supplying paper for many other English journals. Over $6,000,000 has been expended in the Grand Falls enterprise, and at least 3,000 men are regularly employed. The wages paid to men in the mills are from $1.25 to $4 per day, according to the nature of the employment. Choppers and sawyers in the forests receive from $18 to $20 per month and board. It is said that the number of men in the camps taking out pulp wood, etc., this season is the largest on record, and that the wages given are in advance of former years. Weather conditions have been exceptionally good. It is also stated that Newfoundlanders are most adaptable for any kind of work that has to be done in such enterprises as those at Grand Falls and Bishops Falls and are good all-round workers. The Grand Falls mills are being operated to their utmost capacity, and as large additional storage houses have recently been erected by the company the whole output can be well taken care of until navigation opens. The equipment for the mills at Grand Falls came mostly from the United States and for Bishops Falls from Norway.

During the year 1912 six additional pulp grinders were installed in the pulp mill at Grand Falls, so that the total output of mechanical pulp was over 400 tons per day. Two more fast paper-making machines were added to the paper mill, which increased the output of paper to over 1,000 tons per week.

The exportation of paper (news) for the fiscal year ended June 30, 1913, amounted to 44,424 tons, valued at $1,999,229, all of which went to England. The exports of pressed ground wood pulp for the same period amounted to 51,487 tons, valued at $436,352, of which 40,367 tons, valued at $314,568, went to England, and 11,120 tons, valued at $121,784, went to the United States.

Canada was formerly Newfoundland's source of paper supply, but the German papers, and indirectly some from Sweden, through Canadian houses, are becoming more popular, owing principally to variety and value.

As a rule, paper from Europe or the United States will cost about 55 per cent landed (duty paid). Sometimes it will be a little less from Montreal if by direct boat. The customs duty is 35 per cent ad valorem. Prices are quoted f. o. b. factory or shipping port, and terms usually granted to importers are 30 days sight.

MEXICO.

CHIHUAHUA.

From Consul Marion Letcher.

Neither corrugated double-faced strawboard nor any other wrapping materials are being used in this consular district at the present time. There is no demand for these materials for use in shipping, since it is not thought that they are sufficiently strong to undergo the rough treatment which shipments from this city to rural points must necessarily have.

DURANGO.

From Consul T. C. Hamm.

At present no market exists in this consular district for paper, and any report which faithfully portrayed actual commercial stagnation would of necessity deal rather with revolutionary activity than with business openings. A report dealing with the normal requirements of this district would be misleading, and might in some cases actually redound to the injury of American manufacturers and exporters.

ENSENADA.

From Vice Consul Claude E. Guyant.

The northern district of Lower California offers no inducements whatever to American manufacturers of paper as a market. The entire district has but about 10,000 inhabitants, and Ensenada, the capital and principal town, has only 1,500.

Paper is used here only for correspondence and for wrapping, and for these only small quantities are required. Practically all the paper used comes from the paper mills in central Mexico, but sometimes a very small quantity of the better class of correspondence paper is imported from the United States. This comes from wholesale firms in San Diego or Los Angeles, Cal., never from the manufacturer. The entire paper consumption of Ensenada and vicinity, however, is negligible. Outside the Government offices not over two reams a month are required for the commercial correspondence of all the town. There is nothing here to interest American manufacturers and exporters, but even if the paper market were worth while, they could hardly compete with the Mexican mills while the present surtax on the regular import duties is in force.

LA PAZ.

From Consul Lucien N. Sullivan.

Practically the entire paper supply for this district comes from Mexico City; but, La Paz being a town of only 5,000 inhabitants and having very little commerce, the amount is unimportant.

There is slight demand for paper for printing purposes, since the only publication is a sheet of four pages, issued about four times a month, with a circulation not exceeding 200 copies. Wall paper is not used, and there is none on sale in this market. All paper used for social and commercial purposes is of very low grade. There are no raw materials available for the manufacture of paper.

There is no possible market for American paper of any class.

MAZATLAN.

From Consul William E. Alger.

Owing to revolutionary conditions, Mazatlan being under seige for the last six months, it is impossible to secure data from any part of the district outside Mazatlan.

Almost all of the paper consumed in this district comes from the mills of the San Rafael Co., of Mexico City. There is little opportunity for American manufacturers, except for insignificant quantities of writing paper of the finest grades and small amounts of white newspaper.

The consumption of writing paper is exceedingly small and of the cheaper class. The class of paper principally used is wrapping paper made from wood pulp, and comes from Mexico City. The total amount used in this district probably amounts to $40,000 in value. This takes the place of paper bags and is used by all groceries and other stores. The sizes most in use are 32½ by 44 centimeters, 55 by 80 centimeters, and 44 by 65 centimeters (1 centimeter = 0.3937 inch); weight, more or less, 50 grams (1 gram = 0.03527 ounce) to the square meter (1 square meter=10.764 square feet). Small quantities of a paper called "celulosa," weighing only 25 grams to the square meter, is also used, principally for wrapping tomatoes for exportation.

In writing papers, that principally used is the ordinary, cheap, ruled, 34 by 44 centimeters and legal 49 by 72 centimeters, weighing 5, 6, 7, and 8 kilos (1 kilo=2.2 pounds) per ream of 500 sheets. Smaller quantities used are 27 by 42 centimeters, weighing 3½ to 4 kilos per ream of 500 sheets; also 20½ by 26½ centimeter. The consumption is small and is principally imported from the United States.

Blank books come entirely from Mexico City. There are but two small newspapers here, and they are without capital, hence can not purchase their stock in carload lots. They are compelled to buy from local merchants, taking only sufficient for a day or two at a time. Carbon paper is all imported from the United States, but importations are insignificant.

There are no paper mills in this district, no paper is exported, and there is no available data as to importations. The entire amount imported of all classes for the district would probably not reach the sum of $5,000 in a year. The use of wall paper is almost unknown, and there would be no market for it.

MONTEREY.

From Consul General Philip C. Hanna.

Paper consumed in this district is of native and foreign manufacture. All newspaper stock, a great deal of cheap book paper, and a cheap cotton writing paper, called "ministro," are made in this country and used extensively. Germany imports a white book paper, containing more than 40 per cent mechanical wood pulp and weighing more than 50 and less than 150 grams (1 gram=0.03527 ounce) per square meter (1 square meter=10.764 square feet). This German product is better than the native manufacture and represents about 20 per cent of the total consumption of book paper in this district. Nearly all the better grade of writing paper and about one-half of the better grade of book paper comes from the United States. Linen-finish writing paper is very popular. Bible and India are not used in this section. All wrapping and manila consumed is made in this country. Cover, blotting, cloth-lined, parchment, wax, carbon, and boards are imported, mostly from the United States, except pulp board, which is manufactured in this Republic and used in place of strawboard for the manufacture of boxes, etc.

There are no paper or pulp mills in this district. Wholesalers, publishing, and printing concerns procure their stocks at about the following prices: Native news paper, at 18 to 20 centavos (1 centavo = one-half cent) per kilo (2.2 pounds); native book, at 25 to 30 centavos per kilo; German book (imported), 35 to 40 centavos per kilo; American good enameled book, 60 centavos per kilo; American writing that sells in the United States for 6 cents per pound sells here wholesale at 30 centavos per pound; the 10-cent grade at 40 centavos per pound; the 20-cent grade at 60 centavos per pound.

The raise in prices in the United States during 1911 and 1912 lowered the paper imports into this country. American bond paper (writing) was substituted by a bond of good quality, but not as good finish, of home manufacture, and other classes were likewise substituted. Up to 1911, for the five years previous, importation of American paper had increased considerably, but the consumption of native products increased much more in comparison. German imports have increased somewhat.

American sales in this district can not be much increased until our manufacturers and sellers of all the different kinds of paper cater to the market.

The "quadruplo size" is the standard and is about 27 by 37 inches. Germany does not carry Mexican sizes in stock, but upon receipt of an order the paper is cut up at once and shipped promptly. Sellers of the United States fill orders promptly when ordered in American sizes, but when ordered in Mexican sizes the shipment is delayed at the mills from four to six months for cutting.

The customs duties on paper containing more than 40 per cent of mechanical wood pulp and weighing from 50 to 150 grams (1 gram = 0.03527 ounce) per square meter (10.764 feet), in normal times, is 7.50 pesos (1 peso = $0.498) per 100 kilos (220.46 pounds), while paper of the same kind and weight but with less than 40 per cent mechanical wood pulp, is assessed at 20 pesos per 100 kilos. Germany conforms to the weight and per cent of mechanical wood pulp that will take the lesser rate while our American paper takes the higher rate.

Credits deserve consideration. Germany allows from four to six months time. The native mills allow about 60 days, but are very lenient and accommodating in making collections. The American exporter allows only 30 to 60 days and is very insistent if each bill is not paid exactly on the date specified.

To increase American importations into this district the three points above mentioned must be considered and thoroughly investigated by our manufacturers and sellers.

PAPER PACKING BOXES.

The small volume of shipments of goods in corrugated boxes consists of small articles by mail or express, in which corrugated board boxes which have been received as containers for imported goods, are utilized; in other words, no corrugated strawboard or pulp-board boxes are imported empty for use in shipping or packing.

SAN LUIS POTOSI.

From Consul Wilbert L. Bonney.

It is estimated that paper of all classes to the value of $45,000 is brought into the San Luis Potosi district annually, of which more than one-half, in value, is imported. The cheap paper used for printing newspapers and handbills, cheap wrapping paper, and cheap wall paper and strawboard, is furnished by the San Rafael Co., of Mexico City. The San Luis Potosi district furnishes to that factory 50 tons of sulphur per month for use in its processes.

The finer grades of writing paper, bond and document paper, wall paper, and blotting paper come from the United States. Much of the engraving of notes, certificates, and similar work is done in the United States. Linen paper and Bristol board come from Belgium and Germany and tissue paper from Japan.

The paper most in demand is the grade used for printing newspapers and handbills, which is a native paper of rather poor quality. This paper costs the dealers about 10 cents per kilo (2.2 pounds) at present. The paper next in demand is brown wrapping paper; this article was formerly imported from the United States, but is now supplied by the native factory above named, the price being about 12 cents per kilo.

Wall paper is mostly imported from the United States and France. It is not used to the same extent as in the United States, although there is a fair market in the cities. The market for book, tissue, and blotting paper is negligible. Wall paper comes in rolls of 7½ meters (1 meter = 3.28 feet). This paper, costing 2 cents per roll in the United States, retails here for 9 cents per roll; a grade which costs at wholesale 10 cents per roll in the United States retails here for from 60 to 65 cents per roll.

For letter paper, the sizes purchased by the dealers, are what are known as quarto (10 by 13 inches) and octavo (6 by 9½ inches). For blank-book making, which represents a relatively good demand, the sizes used are 45 by 68 centimeters (1 centimeter = 0.3937 inch) and what is known as crown, or 15 by 19. Heavy paper of fine grade for society printing comes largely from Germany.

There is no demand for Bible or India paper, or for fine book papers. Carbon paper is imported from the United States and the sizes are the same as in use there. There is a small sale of blue-print paper to engineers and to schools; this is imported and retails here at $3 for a 10-yard roll 30 inches wide.

The paper in use for social and commercial correspondence is usually of inferior grade. The paper and Bristol board used for engraving is of good grade. The paper commonly used for envelopes, including stamped envelopes sold at the post office, is very inferior. In fact, it may be said all paper used is of poor grade excepting a small amount of imported correspondence paper and Bristol board, document paper, and paper used by engraving houses.

For wrapping purposes in bakeries and stores old newspapers are used, and these command a price of 3 to 4 cents per kilo.

There is no timber in the San Luis Potosi district suitable for paper making, no paper mills, nor is there any exclusive dealer in paper.

The paper-making industry having been started in the Republic, and the materials being available, it is my opinion that this is one of the lines of manufacture that will develop at least as rapidly as the demand develops, and perhaps native papers will even compete with those qualities now imported.

The wholesale prices of some native and imported paper, per kilo (2.2 pounds), are as follows: Native paper—Letter paper, 15 to 25 cents; bond paper, 22 to 30 cents; book paper, 21 to 35 cents; news paper, 10 cents; wrapping paper, 20 to 30 cents; strawboard (poor), 5 cents. Imported paper—Letter paper, 66 cents; bond and linen paper, 88 cents per kilo; and Bristol board, 13 cents per pound.

VERA CRUZ.

From Consul William W. Canada.

In the Vera Cruz consular district there are no paper mills at present. A number of years ago there was one small mill in the city of Orizaba. However, it manufactured a poor grade of wrapping paper only, and never prospered, owing to the competition of the products of larger companies and of imported papers. As a consequence, all the paper used in this part of the country has to be brought either from the interior of Mexico or from abroad.

The paper of Mexican origin has had the advantage whenever the output of the mills has been able to satisfy the requirements of the paper buyers. Already under the ordinary tariff provisions the manufacturers could import raw materials from Norway, Sweden, Russia (Finland), and elsewhere free of duty, while all manufactured paper was subject to rather heavy imposts.

Lately, with the several surtaxes placed from time to time on almost all imported articles for war purposes, the manufacturers in Mexico found conditions favorable for disposing of their output, even though the market for both native and foreign papers suffered, owing to the revolutions in the country.

The manufacturers in Mexico are active and energetic, and have been making a more careful study of the requirements of the local market. The most powerful of the corporations and the one that has the most control in this consular district is the San Rafael Co., of Mexico City, with its paper mills at Tlatmahalco, in the State of Mexico, large offices in the city of Mexico, and distributing agents and representatives in various cities of the Republic. In the past the output of the mills was of a poor grade, but more recently the company has begun to manufacture, in addition to the cheap qualities for miscellaneous correspondence, newspapers, pamphlets, handbills, notices, etc., fairly good grades for commercial, official, and social correspondence. As the company extends its operations and manufactures on a large scale, it is able to sell good paper at attractive prices and to meet to a greater extent the competition of the papers imported from abroad.

In spite, however, of the advantages possessed by the native papers, the imported products hold their own. In some instances papers similar to those manufactured in Mexico are kept in stock side by side with the native products and are sold because they can compete in price. In other cases the foreign article meets a demand which the Mexican paper mills can not supply. In still other instances importations are due to the prejudices of the foreign population and of Mexicans educated abroad in favor of a certain grade, shape, or size of paper which it would not be worth while for the native mills to manufacture. In fact, the foreign element plays a more significant rôle than might be supposed. The principal local dealers in paper are Germans and Spaniards, almost without exception, and as a result Europe gets part of the trade which would otherwise fall to the lot of the United States.

MARKET REQUIREMENTS.

No statistics exist as to the amount of each kind of paper used in this consular district. The local paper dealers sometimes import their stock directly from abroad and sometimes buy both foreign and native papers in Mexico City or other parts of the country. The large business firms make purchases in like manner, the branch houses either being allowed to use their own discrimination or being furnished by the head offices. The Government officials, as a rule, receive their best supplies from Mexico City and buy the ordinary paper wherever they wish, now from the local dealers, now from the capital. As to individuals, those in the towns buy in the nearest shop whatever suits their fancy, regardless of whether or not it is a foreign or domestic product, and those in the rural districts secure what they want in the village store, order by mail from Mexico City, or lay in a supply the first time they go to a large town. As a consequence, the compilation of statistics as to local consumption is impossible, and even an estimate would be without basic facts and hence of little practical value.

For commercial correspondence the average size of paper is 8½ by 11 inches. A native paper of medium and rather good grades is used extensively, although a small proportion of imported bond paper of light weight and of an ordinary grade is also seen. For official correspondence a paper of 8½ by 13 inches or of about 17 by 13 inches folded to 8½ by 13 inches is invariably used. Native bonds, of grades varying from a fair quality to a fine linen finish, are the most common. For social correspondence the Mexican women do not, as a rule, employ as choice a paper as do American women of the same class. Nevertheless, there are a few importations of expensive and excellent writing paper, especially from England, Italy, and Belgium, but in general such paper is purchased by foreigners. The native paper is sold in sizes approximately 6 by 8 inches folded into 4 by 6 inches, and frequently has lines. In this connection it might well be added that a paper with either a narrow or wide black border and envelopes to match is much in vogue, its prevalence being due to the custom of observing the period of mourning much longer than in the United States.

For blank accounting books a paper 8¾ by 13½ inches or even multiples thereof is employed. The native paper for this purpose is sold by the manufacturers, ruled to meet any ordinary requirements, and serves to satisfy most of the demand.

The publishing of books is not an industry of this district. At times the State government departments in Jalapa have had pamphlets and a few books published in that capital, and occasionally the printers in the other cities are called upon to issue a directory, catalogue, or novel, but all important books are published in Mexico City. Consequently the book paper used here is generally of a low grade of native manufacture, glazed on both sides, and there is no prospect of selling good grades.

The only important newspapers published regularly in this consular district are printed in the port of Vera Cruz. The paper used is of Mexican origin and of a cheap but not unsatisfactory grade, the wholesale price being about 3 cents, American currency, a pound. It comes in rolls of conventional widths or in sheets of the following sizes: 23¾ by 33¼, 26½ by 37½, and 29¼ by 47½ inches.

For wrapping purposes the native mills make a strong cheap paper and undertake to print on it the name and any advertising matter that the firm buying it may desire. This paper sells in the same sizes as the news paper, the medium size (26½ by 37½ inches) selling for about 30 cents, American currency, a ream. In addition to the native paper the Spanish merchants are wont to use a straw wrapping paper which is imported from Spain.

Manila and bogus manila paper are not employed to a great extent. A small amount, however, is used for file copies by the steamship companies and by the local railroad offices, the supplies of the latter being furnished by the purchasing departments in Mexico City.

Wall paper has never won any favor in this consular district. In fact, its utilization is rendered inadvisable beause of the moisture of the climate, latently destructive along the coast and manifestly active in the rainy highlands, and because of its affording a lurking place for several forms of insect life, which, with the present attractive mural decorations of fresco and paint, may easily be eradicated.

Tracing and other papers required by engineers and architects come from abroad, usually from the United States and Germany. Very good grades are always kept in stock by the important hardware stores but can not often be found in the ordinary paper stores.

The native paper mills supply much of the demand for blotting and cover papers. The same is true of tissue paper for commercial use, although the many colored tissue papers used for festoons and other purposes in the festivals are generally of foreign origin.

Cloth-lined, parchment, wax, and carbon papers are imported from abroad, indirectly, as a rule, through Mexico City. Of these, the only variety used extensively is the carbon papers. American carbon papers are the most popular and are in general use in the business houses, but they do not displace entirely the products of other countries. The American carbons owe a large part of their sales to the fact that typewriter agents representing American firms often act as distributors. Parchment paper is used for certain legal documents by the notaries, a fairly good grade of low-priced papyrin being imported from Spain.

Box board and pressboard are manufactured by the Mexican paper mills, but in general the supply of boards of all kinds is imported, the United States and Germany securing most of the trade. The amount used in this consular district is somewhat limited.

In the larger cities, such as Jalapa, Orizaba, and Vera Cruz, cigarette factories import a small quantity of cigarette papers, especially from France and Spain, but for lining cigar boxes it is found more profitable to use papers of native manufacture.

For festivals, similar in character to those of France, Mexico imports from that country a certain quantity of confetti and serpentine papers, although of late the demand is being more and more supplied at home.

HOME PRODUCTION AND THE IMPORT TRADE.

As has been said, there are no paper mills in this district. In spite of the fact that raw materials in the form of a large variety of vegetable fibers and refuse from the textile factories of Orizaba and Jalapa could be rendered available without much effort, any mill that might be established would probably be forced to close by the competition of the San Rafael Co.

In the statistics of imports through the port of Vera Cruz in 1913 it will be observed that the United States is far in the lead. Yet this has not alway been the case. Some years ago paper was sold in this district almost exclusively by the hardware stores. The more important of these were Germans. In consequence, bound as they were to their country by ties of blood, associations, and commercial relations in the hardware line, they naturally looked first to Germany in buying paper and through their purchasing agents succeeded in establishing advantageous connections there. They still claim that in most instances they can make more profit on German paper, and for that reason give Germany the preference over the United States. As a result, in the amount of exports to and through this port, Germany ranks as a close second to the United States.

After the Germans had enjoyed more or less of a monopoly of the retail paper trade for several years, stores dealing only in paper and office supplies began to spring up. The owners of these stores are almost always Spaniards, and at first imported their stock directly or indirectly from Spain. Lately, however, as these dealers have gained more experience, they have found it more profitable to buy paper from the United States and other countries, so that Spain has rapidly lost much of the trade and now furnishes but a small quantity. Yet it must be said that American manufacturers have not developed all the possibilities of selling to these dealers and would find that the sending of a few Spanish-speaking representatives into this territory would create greater interest and bring orders, especially from the dealers who are now diffident about ordering direct from the United States because of their ignorance of the English language.

Europe also owes its retention of the trade to some extent to the fact that ships come regularly from that Continent. Paper is popular as a cargo with the shipping companies because the boxes are of uniform size, compact, and not bulky and because even on the most heavily loaded vessel a place can be found in which to put them.

In the matter of terms it will be found that the Germans are not infrequently willing to pay cash, but the Spaniards and Mexicans are attracted by long terms and for this reason often buy foreign papers in Mexico City instead of making direct importations from abroad.

The local method of quoting prices is in kilos (1 kilo = 2.2 pounds) and reams, and it would be well for American manufacturers to adhere to this custom, even though they quote the prices in the well-understood American currency.

The following table shows the value, in American currency, of paper imports into Mexico during 1913, through its most important port, Vera Cruz:

Description of paper imported.	United States.	France.	Germany.	United Kingdom.	Other countries.
Refuse and waste of paper and pulp of vegetable fiber in sheets for the manufacture of paper, not dyed, perforated at spaces not exceeding 10 centimeters [1]	$18,874	....	$30,364	....	$412,301
Paper of all kinds weighing up to 50 grams [2] per square meter [3]	5,070	$2,686	21,915	$1,644	76,630
White paper containing more than 40 per cent of mechanical wood pulp and weighing more than 50 and not more than 150 grams per square meter	675	....	3,031	....	3,128
White paper containing up to 40 per cent of mechanical wood pulp and weighing more than 50 and not more than 150 grams per square meter	35,930	1,872	10,183	5,552	674
Paper of dyed pulp, and all paper not specially mentioned, weighing more than 50 and not more than 150 grams per square meter	6,757	2,415	1,267	40	619
Paper of the natural color of the pulp, weighing more than 50 and not more than 150 grams per square meter	1,601	....	304	....	1,547
Paper and cardboard of the natural color of the pulp, weighing more than 150 grams per square meter	6,481	37	2,276	628	1,406
White paper and cardboard weighing more than 150 grams per square meter	7,204	680	8,443	833	8,620
Paper and cardboard of dyed pulp, weighing more than 150 grams per square meter	7,722	279	2,740	659	486
Paper cut in strips not exceeding 5 centimeters in width	2,341	136,497	7,300	663	63,301
Paper cut in sheets, of less than 45 centimeters on any of its sides, ruled paper, and watermarked paper	44,939	2,264	13,421	1,137	5,228
Paper with monogram, letterheads printed, engraved, or lithographed	35,972	5,803	11,388	3,606	6,591
Paper, mottled, colored, embossed, and glazed, not bronzed, gilt, or silvered	62,649	8,525	36,562	8,836	29,665
Paper, bronzed, gilt, or silvered entirely or partly	11,129	771	4,211	126	842
Common paper envelopes, not specially mentioned	4,523	1,046	15,762	1,584	1,664
Paper envelopes, with monogram, name or other printed matter, including advertising matter	657	2,052	309	98	454
Total	252,533	164,927	169,476	25,406	613,156

[1] 1 centimeter = 0.3937 inch.

[2] 1 gram = 0.0352 ounce.

[3] 1 square meter = 10.764 square feet.

CENTRAL AMERICA.

BRITISH HONDURAS.

From Consul William L. Avery, Belize.

The demand for paper for various uses is less in the colony of British Honduras than the population of 41,000 would indicate; for fully two-thirds of the people have little use for paper, living as they do in the out districts where nature supplies the leaf of the pimento and banana for purposes of wrapping parcels and products and where little correspondence is carried on.

The people living in the towns, or the other one-third, are the principal users of paper for wrapping, printing, writing, and household purposes. Since, however, the telephone came into general use, some eight years ago, the demand for note-letter and note paper for social uses has decreased perceptibly.

The customs classification of imports is very general, and embraces many articles under the heading of "supplies," "miscellaneous," etc. That system prevents an accurate statement as to paper importations, but investigation proves that all paper for printing purposes, all the lighter wrapping paper, and fully one-half of the writing paper coming into this country is from the United States. This excepts, of course, the paper imported by the Government, all of which is ordered from England, through the Crown agents for the colony, in compliance with the regulations, though an emergency order may occasionally be sent to New Orleans.

Such customs returns as are available show that for 1912 the importations of blank books and stationery were, Government supplies not included, from the United States, $7,881; Great Britain, $3,410; and other countries, $961. These statistics indicate the proportion of the imports from above sources, but are not complete, for I do not find any account of paper imported, nor any mention of the word paper, in the official bluebook.

Writing paper is of the usual sizes and of a quality varying from very common to very fine, about one-half of it coming from England, where the prices are a shade better. That country also furnishes the heavier grade of wrapping paper, but not in considerable quantity, as there is small demand.

Other wrapping paper—straw and glazed manila—comes from the United States, the former in sheets 20 by 30 inches, and the manila in rolls of varying widths. There is less demand for common wrapping paper (straw) than would seem usual; none being used at the public market, for instance. There all meat is passed directly from the hands of the butcher to the purchaser's basket, the same custom applying to fruits and vegetables and all other articles sold at the market. In the United States or in England such an industry would use many hundreds of pounds of straw paper every year.

The blotting paper that is bought and imported is almost entirely from England.

Paper for building purposes is not imported, and the use of wall paper is not frequent, though there are houses in which it is seen. Some of the most pretentious residences have been completed without the use of wall paper, wood and hard-oil finish being much favored.

British Honduras does not produce paper, pulp, or any material of the vegetable kingdom from which it is known paper can be made. The trade is confined to imports, with steamship rates from New York, New Orleans, and Liverpool being practically the same and the credits not greatly different, though the nearness of the American market and satisfaction with our methods works greatly in our favor.

There are two printing establishments in Belize, both of them placing all orders for paper supplies in the United States. One of these plants is the publisher of the single newspaper issued, an issue that requires some 9,000 pounds per annum.

This market can not be greatly increased, though our traveling salesmen might, and probably would, direct a little more trade our way. Much of the trade has gone across the sea, perhaps for lack of interest in a market that requires less than six figures, or even five.

COSTA RICA.

From Consul Samuel T. Lee, San Jose.

The United States is the principal country of origin for paper imported into Costa Rica, with possibly the exception of the kind of paper classified in official statistics as writing paper. Official statistics give only the following divisions of paper imports: Wrapping paper, writing paper, cigarette paper, printing paper, wall paper, and articles of paper.

Germany is the chief competitor of the United States, probably for the reason that many of the leading importers are Germans. A leading American dealer in this market states that he can meet with advantage about all demands of trade by ordering from the United States, and, in spite of the strong pro-German sentiment of the larger importers here, statistics show that the United States takes second place only in the writing papers.

The market calls for no special designs, and American salesmen work the territory with standard samples of paper offered to the trade in the United States. Writing papers in general use for social and commercial correspondence are of a good medium grade.

No paper of any sort is manufactured in the country. The following are the latest available statistics covering the value of importations during the calendar year 1912:

Classes.	United States.	Germany.	Other countries.	Total.
Wrapping paper	$18,890	$18,343	$2,445	$39,678
Writing paper	5,330	6,351	1,301	12,982
Printing paper	36,745	9,502	488	46,735
Wall paper	4,851	3,151	2,763	10,765
Articles of paper	5,359	1,691	363	7,413
Total	71,175	39,038	7,360	117,573

In addition to the above, Costa Rica imported $18,855 worth of cheap brown cigarette paper during the same calendar year and $15,957 worth of this came from Spain.

Prices f. o. b. New York, Boston, or New Orleans, are clearly understood and wanted by importers. Ninety days' time is usually extended to dealers in this market, and considerable buying is done through New York commission houses, which charge 2½ per cent for cash trading and 5 per cent when goods are bought on time. The more important importers, however, are now buying directly from the dealer in the United States. Transportation and banking facilities are ample and well established, and in competition with all other paper-exporting countries the United States enjoys the advantage of proximity.

GUATEMALA.

From Vice Consul William Owen, Guatemala.

The attached statistical digest of importations into Guatemala during the year 1912 will describe this country's trade in paper. The great lead of Germany must be traced to the following causes:

1. Large predominance of German business establishments in Guatemala. Most of these houses order direct through their correspondents at home.
2. Cheaper paper furnished by German mills. A Guatemala importers tells me that 4 marks ($0.952) will buy in Germany just as much and just as good paper as $1 will buy in the United States, thus giving Germany an initial advantage of very nearly 5 per cent.
3. Germany gives this trade 120 to 180 days' credit, with interest at rate of 6 per cent per annum, while the United States extends 60 days only.
4. That oft-repeated story of packing also leaves its mark. Germany gives better attention to the orders, by studying the customs tariff, packing in light but strong boxes when duty is paid on gross weight. The writer walked through an importer's storage warehouse, and found that the German packing cases could be picked out at a glance. They were light wood strapped with narrow bands of iron, making a case which stood exceedingly hard traffic and remained in good order. German tare averages under 10 per cent, while American goes up to 15 per cent.

As shown by the statistical table below, the following kinds are in demand, viz, news paper, linen ledger, flat writing, wrapping, bond, and book paper. Standard mill sizes are used, but special sizes are not much ordered. Paper for social and commercial correspondence is principally of low grade, there being small demand for the finer article. Foreign houses use square, light-weight envelopes, colored, with light-weight paper. American concerns more generally use envelopes 3⅝ by 6½ inches, and pay much less attention to light weight.

For cost of paper placed in store at the city of Guatemala, add 6½ cents per pound to New York f. o. b. prices for all grades of colored and white writings, and 9 cents per pound for high-priced bond and linen ledger paper.

There are no paper or pulp mills in Guatemala. While white softwoods exist throughout the tropical forest and jungle, they are scattered and secured only at heavy expense.

The following table shows the quantity and value of the various kinds of paper imported into Guatemala during 1912, by countries:

Articles and countries.	Quantity.	Value.
Unsized and unglazed paper for printing:	*Pounds.*	
France	436	$29.60
Germany	77,402	4,576.88
Spain	75	20.00
United States	159,379	8,849.74
Stamped paper: United Kingdom	6,724	3,090.00
Paper of all kinds, half-sized or sized:		
France	1,016	224.60
Germany	95,004	7,491.45
Japan and China	417	86.00
Spain	2,416	404.04
United Kingdom	3,022	532.36
United States	22,829	2,419.62
Wall paper:		
Belgium	4,751	359.00
France	1,272	110.00
Germany	23,347	2,116.75
United Kingdom	3,344	367.67
United States	8,005	697.91
Cigarette paper:		
Belgium	9,226	1,086.80
France	1,764	205.00
Germany	105,767	11,581.50
Spain	85,835	12,174.00
United Kingdom	21,916	2,594.23
United States	2,800	331.42
Glass or emery paper:		
Germany	5,256	1,202.25
United States	1,082	77.14
Tissue, lace, and other fancy papers:	*Pounds.*	
Belgium	3,408	$310.00
Germany	45,442	3,619.37
United Kingdom	3,869	315.25
United States	2,848	307.32
Paper with gilt or silvered surface:		
Belgium	216	81.40
Germany	1,856	978.30
United States	361	39.98
Packing paper:		
Belgium	2,383	59.50
Germany	325,067	11,848.81
United Kingdom	4,570	98.61
United States	234,576	7,721.16
Tarboard: Germany	4,233	43.50
Common cardboard in sheets, strawboard, pulpboard, etc.:		
Germany	23,444	1,229.19
United States	13,283	492.46
Drawing paper, rough for crayon, and card for raising embroidery, in sheets:		
Germany	4,876	667.82
United States	59	11.75

HONDURAS.

From Consul E. W. Lawton, Tegucigalpa.

Until 1900 the greater part of the paper used in Honduras was imported from the United States. Since then Germany, France, and England have had a majority of the trade, but within the last year American paper has begun to regain its position.

Figures are not available to show even the gross value of paper imported into Honduras, and it is impossible to give any accurate figures of the consumption of the various classes of paper. The consumers of large quantities of paper are few in number. Large stores retail to the smaller ones and 80 per cent of all used in the Republic is supplied from this capital. One store in Tegucigalpa has 18 branch stores throughout the country, one 11 and others have several branches each. One daily newspaper and a majority of other periodicals, besides Government publications in General, are published at the National Printing Office here and this institution handles nearly 50 per cent of all the paper stock used in Honduras. With these conditions, fairly correct estimates can be made. The following is an estimate of the annual consumption: Letter paper, 1,800 reams; foolscap, ruled, 1,200 reams; news paper 7,800 reams; book paper, 2,040 reams; manila paper, 37,450 reams; wrapping paper, 10,500 reams; colored (cover) paper, 1,400 reams; carbon paper, 8,000 sheets; blueprint paper, 450 yards; filter paper, 1,010 pounds; strawboard (mostly for book binding), 1,100 pounds; wall paper, 2,800 pounds; Bristol board, 225 pounds.

In addition, the Government issued 143,000 double sheets of stamped paper, besides paper of about an equal amount of much the same class for official documents. There were also 1,099,984 telegrams and cablegrams sent, requiring a stamped blank in about half the number and an official printed form for the rest, together with the form used for the delivered message. Comparatively few blanks are wasted.

While the above estimate of letter paper is given in reams of sheets, 17 by 22 inches, a very large part of the letter paper is not imported in that form, but in blocks with cover and printed advertisement of the dealer, cut to letter and note size. Moreover, much of this grade of paper is very ordinary in quality, similar to book paper and usually is ruled. The cheaper grades meet with the readiest sale. The best grades of bond, linen, and ledger paper are seldom seen and no Bible, or India, book paper.

No figures are available for quantities of tissue, blotting, parchment, wax, or other less common papers but the amount annually consumed is a negligible quantity. The filter paper listed is almost entirely used in cyanide work by one mining company. It comes in sheets 31 by 63 inches. No figures are attempted on account books, pad, and general stationery other than explained. All of these are imported in finished form, as there is not a ruling machine in the Republic other than at the National Lithographic Works, and bookbinders there only do actual binding of printed matter. Wall paper is not practical for use on the coast. A small amount is used, but more is used in the central plateau. Due to excessive freight and handling charges, besides duty, the cost of wall paper laid down in Tegucigalpa is about four times the market value in New York.

No paper or pulp is manufactured in Honduras. There are probably many raw materials, such as wood or vegetable fibers, admirably suited for the industry but no investigations have been made nor is there any probability of any such undertaking in the near future.

IMPORT FEATURES.

Due to the influence of Germans residing in Honduras, a large proportion of business in paper has gone to Germany. One German firm is the financial agent of the Government and controls the shipping from and to Amapala, the Pacific port. While the said firm is agent for some American houses they naturally throw their influence in favor of German products. A case in point is where an order for a million telegraph blanks and envelopes was being placed. An American firm made an offer but the order was landed for a German house at about 30 per cent additional. The same firm finances Government bills, receives 5 per cent commission on all Government import orders and 6 per cent per annum interest on money advanced to pay bills, until reimbursed.

During the past year, by efforts put forth by this consulate, some considerable orders have been sent to the United States. At the present time manila paper and news paper are almost entirely imported from New York. This will probably be entirely the case if the promise is fulfilled, recently given to this consulate by the Minister of Hacienda, that the next order of the Government for news paper will be sent to an American firm, whose representative was here last year and was at that time promised the order. Some houses have supplied this consulate with samples and one American merchant is also handling paper and recently landed an order for 100,000 lithographed letterheads and envelopes for the Government.

FREIGHT, PRICE QUOTATIONS, AND TERMS.

The freight to Amapala from New York and from European ports is very nearly equal. New York houses usually quote f. o. b. while German houses usually have a charge for boxing and packing of 2 marks ($0.476) or more per case or package. A recent order was secured here by an American manufacturer on a price for a certain grade of news paper, 30 by 30½ inches, at a price of 2½ cents per pound f. o. b. steamer in New York, while the competing German firm offered 3 marks ($0.714) per ream plus 2 marks ($0.476) per case of 5 reams for packing and also cost of freight from Coblenz to seaport. The difference in delivery would be about 86 cents a ream.

Prices of American manufacturers are usually about the same as European prices, but the terms offered in Europe are more attractive to Honduras consumers. They usually give six months time from date of bank acceptance of draft, which is always sent in advance of shipment, or if shipped to shipping agents (German) in Amapala, the agents charge from 6 to 15 per cent per annum interest on the account for accepting and paying for shipment. The same agents also collect a substantial commission and handling charges, which, however, apply to all shipments received at that port.

A comparison can be made from the following:

Articles.		Cost f. o. b. New York.	Cost in Tegucigalpa.
Manila paper	per pound	$0.08	$0.13
News paper	do	.14	.21
Foolscap	per ream	1.50	2.50
Toilet paper	per pound	.13	.30

Manufacturers should supply responsible and large consumers with as complete a line of samples as possible and endeavor to show a personal interest in every customer.

The National Printing Office here asked for samples of leather for binding. A dealer in New York stated (the letter was shown to this consulate) that never having done business with them, samples could not be sent until a trial order had been placed. Samples were later secured and a considerable order placed through a German importing house. American manufacturers too often are interested only in results produced in actual orders. Perhaps a better policy would be to do missionary work first. It is conceivable that a traveling salesman might make a trip through Latin America without booking a single order, yet in the end it would be a most profitable trip for his firm, especially if followed up by personal letters and subsequent trips. Credit ratings can be learned through local banks, if there is no mercantile agency. In Tegucigalpa is the Banco de Honduras and the Banco de Comercio, the latter an American concern. With very little effort the entire paper trade of Honduras can be secured for American manufacturers, with insignificant exceptions.

NICARAGUA.

From Consul Harold D. Clum, Corinto.

The importations of all classes of paper into Nicaragua aggregate about 875,000 pounds (gross) annually (877,343 pounds in 1912, 873,210 pounds in 1913), exclusive of printed books and other printed matter.

The value of these importations amounted to $59,587 in 1912 and $62,946 in 1913. It is estimated that the western half of the Republic (the consular district of Corinto) receives about three-fourths of the paper imported, or approximately 656,250 pounds annually, valued at about $45,950.

The varieties of paper most extensively imported are (*a*) printing paper for newspapers and pamphlets and (*b*) common writing paper (usually in blocks). Some typewriter paper is also used, but comparatively little carbon paper and practically no manifolding paper.

Germany is the principal source of importations of paper into this district and furnishes nearly all of the cheap paper used for newspapers. The United States competes in selling the better grades of printing paper, and in writing and typewriter paper. German paper is of inferior grade to that imported from the United States and cheaper. France and England export small quantities of paper to Nicaragua, principally writing paper and envelopes.

It is estimated that the consumption of printing paper for newspapers in this consular district (western Nicaragua) averages about 500 reams per month. This is a cheap grade of printing paper and is supplied principally by Germany. It costs, laid down in Managua, $1.60 per ream of 500 sheets, 60 by 86 inches, weighing 24.14 pounds, and sells at $2 per ream. According to official statistics, importations of this class of paper into the entire Republic amounted to 366,367 pounds (gross), valued at $7,799, in 1913. The share of the United States in this trade was 25,344 pounds, valued at $1,549, in 1912; and 25,419 pounds, valued at $1,534, in 1913, or 6.9 per cent in the former and 17.6 per cent in the latter year. Printing paper for newspapers is free of duty. The freight from Corinto, the capital, is about 20 cents per ream.

Of writing paper, paper for blank books, and blank books, 189,955 pounds, valued at $26,646, were imported into the Republic in 1913. Of this amount, 95,730 pounds, valued at $10,344, came from Germany, and 55,624 pounds, worth $8,869, from the United States. The greater part of this was of cheap and medium grades, white and light blue in color, mostly in blocks.

Limited quantities of blank books, mostly of cheap grades, and typewriter paper were also imported. It is estimated that this consular district received at least 75 per cent of the imports of the classes of paper indicated by the statistics.

Book papers are little used; Bible or India papers not at all. The quantities of wrapping paper, manila, wall, and drawing papers imported are small. Cheap grades are usually purchased. Colored tissue paper is quite extensively used for street and other decorations. Blotting, cover, and carbon papers are used in small quantities. The majority of business houses copy their correspondence in tissue-paper copying books, but the demand even for these is not large.

Cloth-lined, parchment, and wax papers are seldom imported. Boards, such as strawboard, boxboard, etc., are little used.

The following are the usual sizes of various kinds of paper used in this district:

Writing paper, standard sizes, 10 by 8, 10¾ by 8½, and 11 by 8½ inches; foolscap, 13 by 8½ inches; ledger paper, minimum size, 30 by 22 inches; linen paper, standard sizes, the same as writing paper, above, also 44 by 34 inches; book paper, minimum, 30 by 22 inches; newspaper, minimum, 30 by 22 and 60 by 86 inches; wrapping paper, manila, 43 by 29 inches; wall paper, in rolls 20 inches wide and 9 and 12 yards long; draft paper (for schools, in sheets), 25 by 20 inches and (for engineers, in rolls) 59 inches wide; tissue paper, 11 by 10 inches and in double sheets 13 by 10 inches; blotting paper, 23 by 18 inches; cover paper, 27 by 22 inches; parchment, wax, and carbon papers, current sizes (carbon paper usually cap size); board of all kinds, 28 by 22 inches; strawboard, 40 by 28 inches; envelopes, usually about 5 by 6¼ inches, light blue.

No paper of any kind is manufactured in Nicaragua and raw materials for paper manufacture are not collected or sold in the country. No paper is exported.

The following statistics, supplied by the collector general of customs at Managua, show the quantities, in gross weights, and values of several kinds of paper imported into Nicaragua in 1912 and 1913. Separate statistics for the Corinto consular district are not available, but it may be roughly estimated that the importations of paper into this district were between 75 per cent and 80 per cent of those of the entire Republic.

Articles and countries.	1912		1913	
	Quantity.	Value.	Quantity.	Value.
Printing paper for newspapers:	*Pounds.*		*Pounds.*	
Germany	255.515	$8,880	118.480	$6,245
United States	24,344	1,549	25,419	1,554
All others	85.508	2,169	....	....
Total	365,367	12,598	143.899	7,799
Writing paper, blank books, and paper for blank books:				
Germany	82,240	8.080	95,730	10.344
United States	40,831	4,683	55.624	8,869
France	13,951	1,893	20,291	1,229
United Kingdom	6,925	944	8,662	2,366
All others	40,099	2,861	9,647	838
Total	184,046	18,461	189,954	23,646
All other kinds of paper:				
United States	134,970	9.910	232,852	12,677
Germany	121,465	9,552	128,056	9,317
France	23,759	1,831	29.564	3,580
United Kingdom	4,892	2,489	11.559	1,212
All others	40,741	4,745	27,346	4,714
Total	325,827	28,527	429,377	31,500

Shipments of printing paper from the United States to Nicaragua have increased from 6.9 per cent of the total in quantity and 12.2 per cent in value in 1912 to 17.6 per cent in quantity and 19.9 per cent in value in 1913. Exports of writing paper, blank books, etc., from the United States to Nicaragua have increased from 22 per cent of the total quantity and 25 per cent in value in 1912 to 29 per cent in quantity and 37 per cent in value in 1913. The United States leads in the exportation of other kinds of paper to Nicaragua, and our share of the trade has increased from 41 per cent in quantity and 34.7 per cent in value in 1912 to 54 per cent in quantity and 40.2 per cent in value in 1913. Germany's exports of paper to Nicaragua have also increased, except in writing paper, the importations of which were considerably smaller in 1913 than in the preceding year. Several of the leading importers of paper are Germans and prefer to purchase in that country.

Shipments of paper from Germany frequently come to Nicaragua by through steamers of the Kosmos Line via the Straits of Magellan. Freight rates from European and United States ports are not available for comparison, but it is understood that Europe does not enjoy any considerable advantage in this respect.

Prices are quoted by weight and by the ream (on printing paper by weight) f. o. b. Importers usually purchase through export commission houses with whom they have open accounts, paying 6 per cent interest from date of invoice.

PANAMA.

From Consul General Alban G. Snyder.

No paper of any kind is manufactured in Panama, all being imported. The table of imports gives an idea of the character and source of supply. This has not varied in recent years.

The chief demand is for wrapping, printing, and writing papers, there being practically no demand for cardboard in any form, cloth-lined and other papers of this character, while blotting and carbon papers are only handled in small quantities by local dealers in stationery, and the last named to some extent by the various typewriter agents. A few paper bags are imported at times from the United States.

The general demand in all classes seems to be for a cheap, medium, or low-grade paper, and, all else being equal, the United States is given preference, owing to quicker and more frequent shipping facilities. With the possible exception of the very cheap wrapping paper, now imported through commission houses in Hamburg and which figures in official statistics as coming from Germany, but which in reality is of Norwegian manufacture, there is no particular reason at present to justify the impression that there will be any large increase in paper imports in the near future.

The values of imports of paper into Panama for 1911 and 1912, by classes and countries, are as follows:

Classes of paper.	United States.		Germany.		United Kingdom.		Other countries.	
	1911	1912	1911	1912	1911	1912	1911	1912
Cardboard	$546	$360	$458	$777	$98	$420	$5	$150
Cardboard boxes		37	10	35			22	
Cigarette	550	17	3,250	847			394	
Printing	5,720	4,820	1,940	643	260			6
Wrapping	4,827	4,700	15,770	19,600	306	1,315	65	
Writing	7,362	7,700	3,770	1,620	1,060	1,000	310	1,000
Wall, etc	131	180	235	490				248
Others	2,602	4,426	1,012	3,060	1,000		756	4,480
Total	21,738	22,240	26,445	27,072	2,724	2,735	1,552	5,884

German wrapping paper is of a very thin, cheap quality, comes always in sheets, and is quoted by the ream of 400 sheets, terms 60 to 120 days, and is used entirely by a few drug stores and the many small merchants here, especially the Chinese.

American wrapping paper is used by the better houses, being even used by those houses which import the German or Norwegian article for the smaller trade. It comes in rolls from 6 inches to 36 inches in width, 6 and 12 inches being the most popular widths, is quoted by weight, terms from 30 to 90 days. As a general rule the cheaper qualities and lighter weights are preferred. Nearly all houses order their own supplies of paper direct as needed.

News paper and printing paper are imported mostly from the United States by the two large newspapers here—the Star and Herald and the Panama Journal—and by a few small printing shops. The Star and Herald gets part of its supply from Canada, but this, being purchased through New York, figures in the official statistics as coming from the United States.

Nearly all writing paper comes from the United States, the general demand being for a medium or ordinary grade, although a little fine paper is sold in special boxes, as in the United States.

Customs duties are 15 per cent ad valorem. Apart from the better shipping facilities existing with the United States, there are no special factors influencing import trade.

SALVADOR.

From Consul General Henry F. Tennant, San Salvador.

Notwithstanding the proximity of the United States to Salvador, which means quicker deliveries and cheaper freight rates, it appears that no serious attempt has as yet been made by American exporters of paper supplies to enter this field. Salvador's requirements are not difficult to understand or fulfill, but the buying public is as particular regarding the class, style, quality, etc., of articles desired as buyers in the United States; yet American exporters have failed to give consideration to the wishes of local importers, have quoted prices much higher than German and European prices generally, delaying unreasonably the shipping of such orders as may be received, and supplying articles that can not compare with those received from Europe in style, finish, sizes, and packing. Instances can be cited where even orders have been taken and not filled nor even acknowledged. Terms of payment offered by American firms also make it difficult for them to compete with European firms, Salvadorian merchants requiring longer periods in which to pay and a consideration of local conditions regarding exchange, poor mail, freight services, etc.

It has been learned that a number of attempts have been made by Salvadorian importers of paper to secure their supplies from the United States, in order to avail themselves of possible savings in time of receipt of goods and of the cheaper freight rates, but owing to the reasons before mentioned these efforts have proved unsuccessful and unprofitable. Among the difficulties encountered have been careless wrapping, unattractiveness in making up of packages (which have not been marked as to contents), sizes, etc., and generally do not meet the requirements. Europeans, on the other hand, attend with great care to all small details and comply with the wishes of importers in all respects, and until Americans do the same they can not hope to enter this market. Complaint is also made that the minimum quantities handled by American firms are so high that in most cases Salvadorians can not place orders in the United States. The market in this country is not a large one, the country being small and the population only 1,200,000. Large orders can not be placed by importers, but they are made to feel by European firms that orders of any size will be gladly filled.

Owing to the present European situation there exists an opportunity to take over the trade of Salvador in paper of all classes, but this can only be done by conforming to the wishes of Salvadorian importers and by offering the same advantageous terms as Europeans. It is firmly believed that if proper consideration be given this matter, this can be done with great profit to all concerned.

During the year 1913 imports of paper supplies were received to the value of $37,168.97, distributed as follows: Germany, $15,402.77; United States (news paper only), $8,355.46; France, $3,047.94; Holland, $3,850.63; Belgium, $3,192; all other countries, $3,320.17. While the figures can not be segregated to show the proportions of the various kinds of paper imported, it is estimated that the percentages are as follows: News paper, 40 per cent; commercial, legal, and correspondence paper, 45 per cent; and wrapping paper, cardboard, etc., 15 per cent.

Writing paper is required in blocks or pads of 100 sheets, ruled and unruled. There is a market in Salvador for medium-grade paper only.

There is no production of paper in the Republic of Salvador, all demands being supplied from abroad.

The terms of payment usually granted to importers are six months' time from date of invoice, interest of 5 per cent or 6 per cent per annum to be paid on amount of invoice and all charges for transportation, etc., merchandise being shipped f. o. b. port of shipment. American terms are usually part cash with order, balance against draft through the local banks, or cash with order, or cash against draft; or three months' time, all insufficient and unsatisfactory to importers of this country.

Aside from a prejudice against American paper products, due to dissatisfaction in the past, there is no reason why Salvadorian importers of paper supplies would not be willing to import from the United States.

WEST INDIES.

CUBA.

From Consul General James L. Rodgers, Habana.

In Cuba the market for paper of all classes and kinds is similar to that of the United States, with the added requirement of the abnormal quantity of lithograph paper demanded by its extensive use in the cigarette and cigar industry of the city of Habana. Aside from this, there is practically no other peculiarity in class. If any other feature of the market deserves mention, it is that of the disproportionately large quantity of paper for newspaper printing.

As will be noted from the tabular statement following, the United States and Germany are the principal sources of supply of all kinds, and the quotas supplied by each represent the natural outcome in regard to the character of the goods and economy entailed by their purchase.

The paper from the United States is received in standard sizes (17 by 22 and 17 by 28 inches and multiples thereof); the paper of Germany is usually about one-half inch larger per sheet. The quality demanded is not so good from any source of supply as might be desired, this being due to the Cuban tariff, which provides a much lower rate of duty (about 50 per cent less) for paper which can be deemed suitable for all kinds of commercial printing or use (except that of publishers, to whom, for their own publications, there is exemption from duty on wood-pulp paper) than that on the better classes of writing or printing paper.

The customs statistics of Cuba do not convey information as to the importation of specific classes other than that in the broad groupings given below. Therefore no close division can be made, but generally it can be stated that the use of all classes of paper is surprisingly large for a country in which there is so large a percentage of illiteracy.

There is no home production worthy of mention. In Habana there has been some manufacture of coarse grades of wrapping and other papers from the sources of city material supplies and waste cheesecloth. Otherwise there is no attempt to utilize wood or vegetable fibers. The local production of paper being inconsequential, there has been no variation in price of similar products from abroad, and the supply furnished does not fluctuate much from year to year. There is, of course, no exportation of paper.

The following table gives the statistics of imports of the general classes of paper to all Cuba for the fiscal year 1911–12, these being the latest available figures. The amounts are in kilos of 2.2 pounds.

Classes of paper.	United States.	Germany.	Belgium.	Spain.	France.	Other countries.	Total.
Paper in sheets	857,864	118,269	103,270	107,256	56,628	11,885	1,255,172
Wrapping paper	298,608	305,085	11,532	28,647	22,401	65,262	731,535
Board paper	1,012,437	271,813	67,517	9,566	100,456	163,833	1,625,622
All other paper	2,118,937	4,132,744	233,640	696,143	625,508	197,554	8,004,526
Total	4,287,846	4,827,911	415,959	841,612	804,993	438,534	11,616,855
Percentage of whole	36	41	3½	7	7	3½	....

By this table it can be seen that in paper in sheets the American trade amounts to more than two-thirds of the whole, and in board paper about the same. In wrapping paper the trade is about evenly divided with Germany, and this is accounted for by the fact that Germany furnishes a wrapping paper which is much liked by the Cubans, as it has one glazed surface and is cheap. The American wrapping paper does not compete successfully despite the advantage in duty. The great preponderance of Germany in the classification "All other paper" is accounted for almost entirely by the extensive importation of lithograph paper from German mills.

The lithographic industry has been highly developed in Cuba. The cigar trade demands the most elaborate work in lithographing, and therefore has required that which the tastes of the French and Spanish artisans regard as the best lithograph paper. Undoubtedly a good deal of the Cuban patronage of Germany in this line is based upon the familiarity with the European product, but it is also said that the German clay used in such papers gives better results than any used in America. Whatever may be the reason, the fact remains that Germany has practically a monopoly upon that item of the Cuban paper market.

The importations from other countries represent nothing significant, and are the ordinary result of trade, divided somewhat on national lines. There seems to be no reason why the United States and Germany should not continue to have about 80 per cent of the business, with the United States having the greater share in value and Germany in quantity, owing to the heavy lithograph papers. That Germany can maintain her portion of this trade with comparative ease is almost assured for the reasons given, and also because credits for six months at 6 per cent are usually granted.

The proximity of the United States, the character of the paper product, which is generally recognized as satisfactory, and the thorough attention which has been given to the market by American exporters, argues also that it would be very difficult to effect much of a contraction in the American share.

DOMINICAN REPUBLIC.

Santo Domingo.

From Consul General Wm. Walker Smith.

The supply of paper in the Dominican Republic is principally drawn from the United States and Germany, the latter country furnishing chiefly the cheap straw wrapping paper (which is in general use), post cards, other printed paper and notices, and envelopes. The paper coming from Spain, which figures third in the list of supplying countries, is almost entirely cigarette paper. The reason usually given for the importation of wrapping paper from Germany is that it is cheaper than that obtainable from the United States. Though imported from Germany and credited to that country in the import statistics, most of this wrapping paper is believed to really be of Norwegian manufacture.

The latest published statistics giving information as to the amount of the various kinds of paper imported, and the share of the United States and Germany in these imports, are those from the Ministry of

Finance for the year 1911, and are as follows, the arrangement being in accordance with the tariff classification:

Classes.	Total imports.	Total value of imports.	From United States.	From Germany.
	Kilos.[1]			
Straw and wood wrapping paper	245,258	$13,003	$978	$11,004
Writing paper	44,967	10,338	5,216	4,112
Envelopes	13,961	4,318	2,158	2,008
Blank books and memorandum books	25,189	9,057	5,674	2,088
Pasteboard and manufactures of	74,991	11,276	6,289	4,622
Other kinds of paper	98,440	22,308	8,167	4,409
Total[2]	502,806	70,300	28,482	28,243

[1] 1 kilo=2.2 pounds.

[2] These totals are not in accord with the totals of the figures of the Receivership of Dominican Customs given in the succeeding tabular statement.

In general, the better qualities of paper come from the United States. News paper and book paper are of the cheapest grade and come from the United States. Practically all the wrapping paper used is German (or Norwegian) straw paper. Tissue, blotting, cloth-lined, wax, and carbon papers come very generally from the United States. Practically no boards are in use here. Check paper comes largely from Germany.

The high tariff on paper, averaging about 50 per cent ad valorem, greatly limits the importation of paper. Cheapness is of more importance than quality in this case, as in the case of most goods imported here, for due to the high customs duties the cheapness is only relative at best. The paper used for social and commercial correspondence is medium and often of low grade.

The United States has an advantage over Germany in the regular direct steamship service between New York and all the principal ports of the Dominican Republic, since goods can be obtained in less time from the United States than from Europe. Freight rates from the United States and from Europe are about the same, with perhaps a slight advantage in favor of the United States. As a result, price, quality, terms, and method of sale being equal, the tendency here is almost invariably to order from the United States.

Two reasons exist for the importations of certain kinds of paper from Germany, namely, price and methods of keeping in touch with the market.

Certain letterheads, cards for wedding and baptismal notices, etc., are purchased in Europe not so much because the prices are cheaper, though the latter are slightly in favor of the European goods, as because European houses representing these paper manufacturers send their traveling salesmen here from time to time. The terms usually granted by American houses are two and three months, and as much as six months by the German houses. There is no home production of paper in the Dominican Republic.

The trend of trade in paper and manufactures of paper is indicated by the following table, which shows the value and source of importations during the five-year period 1909–1913:

Countries.	1909	1910	1911	1912	1913
United States	$19,598	$29,097	$33,896	$43,092	$54,764
United Kingdom	386	558	293	1,017	1,054
Germany	25,891	34,902	31,941	47,652	52,898
France	3,120	2,458	3,496	2,288	4,020
Spain	530	3,583	6,547	7,404	7,706
Italy	1,721	1,872	1,213	1,352	2,480
Other countries	1,600	1,995	2,639	2,347	2,761
Total	52,846	74,465	80,025	105,152	125,683

As will be seen, the imports of paper more than doubled between 1909 and 1912, and during 1913 a further increase of over 20 per cent was noted. During all this period the United States and Germany have furnished at least four-fifths of the imports. In 1913 the United States again took first place in the list of importing countries, a position which she had previously taken in 1911 but lost to Germany in 1912. The increase in trade from the United States during the five-year period amounted to $35,166, or nearly 180 per cent, while the increase from Germany was $27,007, or a little over 104 per cent.

The situation as to the market for paper, as set forth in the foregoing report applies practically without change to the situation in this district. The Republic is small, commercial practices, terms, steamship facilities, etc., are practically the same throughout the Dominican Republic. The preceding information has therefore especial reference to this district while applying to the country as a whole. The latest statistics, from the ministry of finance, of the various kinds of paper imported into this consular district are for the year 1911. The following table shows the total value of these imports arranged according to tariff classification, as well as the share from the United States and Germany, the two principal countries of origin:

Classes.	Total imports.	From United States.	From Germany.
Straw and wood wrapping paper	$7,919	$747	$7,169
Writing paper	6,499	3,927	2,275
Envelopes	2,347	1,428	885
Blank books and memorandum books	5,435	3,293	1,473
Pasteboard, and manufactures of	7,538	5,595	1,814
Other kinds of paper	12,784	5,289	2,224
Total	42,522	20,279	15,840

The proportionately larger sale of American paper in this district is believed to be due to the number of American sugar estates, whose officers use American paper, ordering it from general agents in New York.

PUERTO PLATA.

Consul Frank Anderson Henry.

The northern half of the Dominican Republic, which comprises this consular district, is an agricultural and grazing country, with no large cities or industries. It therefore does not present a market for varied and specialized forms of paper. The character of paper consumed is suggested by the above considerations, and the relative importance of various kinds is believed, in the absence of statistics, to be as follows: Wrapping paper, news paper and general printing paper, paper for commercial and social correspondence, and all other kinds in small quantities.

Germany and the United States dominate the paper market, and between them furnish from 80 to 90 per cent of the imports. About 35 per cent of the total imports of paper and its manufactures which enter the ports of the Dominican Republic are credited to the four ports of this consular district, namely, Puerto Plata, Sanchez, Samana, and Monte Cristi. About two-thirds of this trade of the country passes through Puerto Plata.

It is impossible to state definitely what amounts of various classes of paper are used, as the import statistics available do not go into details.

For ordinary business correspondence, paper is imported in sheets 17 by 22 inches. These are cut locally into four parts and mounted on cardboard into pads, letterheads, and ruled lines being printed when desired. Such blocks consist of 100 sheets and are retailed locally at 50 cents. The cost of this paper to the importers can not be stated, as they are reluctant to furnish such information.

For ordinary personal correspondence a ruled paper of medium grade is much in use. It is furnished in three sizes, legal, letter, and note. High-grade linen paper is used only by a restricted class who usually import it directly from the United States.

Book paper is not imported at all, as the Republic is dependent on the outside world for its supply of books.

News and other papers of similar grade for printing purposes come from the United States and Germany. Puerto Plata newspapers receive their supplies chiefly from the United States, while in the interior towns, such as Santiago, Moca, and La Vega, Germany is in the lead. One of the papers published in Santiago has the largest circulation of any in the district. News paper comes in sizes 28 by 42 inches, 1,000 sheets to the bale. The invoice of a recent shipment from the United States showed a price paid there of $2.50 per 100 pounds, but quotations are said to vary with the size of the order. German prices are probably a little cheaper, but New York has an advantage, due to proximity.

Wrapping paper is used to a greater extent than any other kind. There are three varieties of ordinary quality in principal use, and a fair grade of manila paper finds occasional employment in drug stores. The three grades referred to above come in sheets 30 by 40 inches, and sell locally for $1.50 per ream. These papers are rather light in weight, yellowish in color, and of indifferent quality. Germany and the United States probably participate equally in this trade. Limited quantities of ordinary manila wrapping paper are imported from the United States, as mentioned above.

There is very little demand for most other classes of paper, such as tissue, carbon, copying, etc., these being rarely kept in stock by merchants, but are ordered directly, usually from the United States, by individual concerns. Blotters, cardboard, Bristol board, etc., are for the most part American. Certain of the largest consumers, such as the soap and shoe factories, import their boxes made up. There are no engravers, but some lithographing is done in Santiago. Cigarette paper comes exclusively from Spain. Toilet paper is kept in stock by drug stores in the leading towns, and has a limited but slightly increasing sale.

There is no home production of paper and no developed source of raw material, nor are there any established wholesale prices, as the market is too narrow.

JAMAICA.

From Consul Cornelius Ferris, Port Antonio.

In the Port Antonio consular district there is no consumption of paper except for wrapping small parcels in the stores and for wrapping oranges. For both of these purposes straw and tissue paper is used. Straw paper is imported from the Netherlands and Germany, the sizes for parcels being 15 by 20 and 20 by 30 inches. For oranges the size is 11 by 11 inches. Tissue paper is imported from England, the sizes for orange wrappers being 10 by 10 and 14 by 14 inches.

The terms of credit usually granted by European exporters are delivery of shipping papers on acceptance of draft at 90 or 120 days' sight. American terms are delivery of papers on acceptance of draft at 60 days' sight.

A small quantity of heavy, fine quality of wrapping paper in rolls is imported from the United States. Stationery is imported both from the United States and England, the latter reaching Port Antonio through importers at Kingston.

There are no statistics showing the imports of paper into this consular district.

SOUTH AMERICA.

ARGENTINA.

BUENOS AIRES.

From Consul General L. J. Keena.

A glance at the paper market and market conditions as they affect the foreign producer sharply divides this product into two classes, viz, paper which can not pay the customs charges and compete in the local market with the home production and paper which must necessarily be imported because unrepresented in the home production.

The papers particularly protected by the tariff are wrapping paper and cheap colored papers. All other classes of paper can be imported and profitably sold in Argentina. However, it is necessary for the foreign manufacturer to have either a deposit here or purchasing connections commanding a comparatively large capital. The demand is varied. The distributing agency must have stock enough to carry its customers over a period of six months or so against emergencies, such as the loss or damage of cargo, delays occasioned by strikes, etc., and, furthermore, the agency should be in a position to extend appropriate credit to the wholesalers, retailers, and large consumers to which it sells.

The American representation in paper lines in this market is particularly strong in newspaper, carbon, blotting, fly, and toilet paper and less so in bond, linen, imitation linen, and book papers and cardboards.

The chief competition to be met in cheap papers, with the exception of the cheap glazed papers, and in cheap cardboard is from the local product. In all other lines the foremost competition has been Germany. English and French papers are also well known and largely sold.

Dealers handling American paper state that there has been a marked increase in the sale of American paper, particularly in news print, during the past few years. Because of the depressed condition of general business in this country since 1912, that increase may have been relative rather than actual, but it is an indication of the favor which American-made paper is gaining.

PRESENT CONDITIONS.

Since the outbreak of the war in Europe many conditions have changed in this market. There is a general impression that Germany and France will be unable to replace the stocks of their goods which are now being sold, and that England, to some extent, will also be handicapped in that regard. So far, in general lines, there has been little buying. In spite of that, two large importers of American papers state that their business and prospects for future deliveries are excellent, one of them adding that he has chartered a neutral steamer for the purpose of increasing his stocks immediately. A third importer reported a very satisfactory increase in all general paper lines, while a fourth conservatively held that he was not increasing his sales to any great extent, and would not until he was surer that payments would be promptly met.

Since Germany has heretofore supplied this market with about one-half, or, say, two and three-quarter million dollars' worth, of paper of all classes per year, it is not surprising that the purchases should, temporarily at least, turn toward the one neutral source of supply. By that it is not meant that Argentina will buy American paper under any conditions and at any price, but that given fair treatment in the matter of terms, American papers of the same grade might easily be substituted in the local market for the papers formerly imported from Germany.

The German strength in paper lines in this market, apart from the excellence of the German business organization in regard to credit extensions, has been in presenting a paper which undersold the papers of the same type which could be imported from other countries. This has been particularly true in all lines of cheap and medium priced coated papers and cardboard for catalogue covers. These papers are undoubtedly inferior to the American article of relatively the same class, but the price has been attractive and they have answered the purpose.

The Government in general uses Argentine paper, except for banknote papers, which come from Italy, and fine book and ledger papers from the United States and England. Purchases are usually made after bids have been asked for, but the ordinary form of calling for such bids is to send a copy of the specifications to the large local houses.

Railroad and theater tickets, handbills, posters, etc., are all made from Argentine products. Some news print is made locally, but it is of very inferior grade, and the American news print has of recent years grown almost to monopolize the import trade in this line.

FACTORIES IN ARGENTINA.

The home industry, according to the census of 1909, included 12 paper factories, having a declared capitalization of $3,100,000 United States currency and annual sales of some $2,400,000. These 12 factories had in 1909 1,405 employees.

Wood pulp and cellulose imported from Sweden, Norway, and Germany are the raw products generally used in paper manufacture in Argentina. The machinery equipments of the three large factories mentioned above is said to be American and of comparatively recent installation. The machines have a capacity of 400 feet per minute.

STATISTICS OF IMPORTS.

A statistical table showing the imports of paper for 1912, with the principal countries supplying this market, and the total imports according to classes for 1913 and the first six months of 1914 is given herewith. In 1913 and 1914 no statistical data has been published which would indicate the countries of production.

Articles and countries.	1912	1913	914, 6 months.
Cardboard for shoe soles:	*Metric tons.*	*Metric tons.*	*Metric tons.*
Germany	63.82		
Great Britain	25.77		
Italy	8.45		
United States	1.37		
Total from all countries	111.37	138.09	20.72
Cardboard:			
Germany	5,177.08		
Netherlands	1,385.04		
Sweden	1,065.57		
United States	265.23		
Total from all countries	9,199.31	9,386.93	4,412.86
Bristol board:			
Germany	495.75		
Spain	118.85		
Italy	28.84		
United States	12.36		
Total from all countries	752.34	841.73	291.44
Lace paper:			
Germany	6.12		
France	2.28		
Spain	1.43		
United States	.24		
Total from all countries	11.23	20.04	4.12
Carbon paper:			
Germany	1.49		
Great Britain	9.62		
France	.78		
United States	2.90		
Total from all countries	15.08	21.23	10.77
Paper in ribbons for telegraph and indicators:			
Great Britain	22.49		
Germany	1.77		
France	1.31		
United States	32.11		
Total from all countries	58.11	90.10	63.2
Paper for newspapers:			
Germany	10,427.03		
Great Britain	1,478.40		
Sweden	2,053.83		
United States	12,572.91		
Total from all countries	27,813.20	30,749.39	13,202.50
Drafting paper:			
Germany	16.64		
Italy	16.58		
France	12.08		
Total from all countries	47.03	43.50	23.34
Wrapping paper:			
Germany	467.50		
Great Britain	118.31		
France	101.30		
United States	23.13		
Total from all countries	980.95	1,256.41	567.75
Writing paper:			
Germany	1,536.83		
Italy	531.28		
Great Britain	419.30		
United States	73.93		
Total from all countries	3,160.82	3,626.22	2,029.35
Chemical paper:			
Germany	26.28		
Great Britain	8.81		
France	2.45		
United States	.02		
Total from all countries	38.60	33.93	7.51

Articles and countries	1912	1913	1914, 6 months
	Metric tons.	*Metric tons.*	*Metric tons.*
Filter paper:			
Germany	12.44	...	...
France	10.58	...	...
Italy	.21	...	...
Total from all countries	23.23	23.36	11.28
Photographic paper:			
Germany	19.55	...	...
Great Britain	20.14	...	...
France	1.47	...	...
United States	12.81	...	...
Total from all countries	54.49	78.53	32.19
Paper for cigarettes:			
Germany	99.28	...	...
France	341.97	...	...
Spain	49.96	...	...
Total from all countries	567.01	383.67	235.75
Toilet paper:			
Germany	76.59	...	...
Great Britain	56.18	...	...
France	30.91	...	...
United States	58.51	...	...
Total from all countries	235.34	226.70	129.64
Sandpaper:			
Germany	93.02	...	...
Great Britain	20.99	...	...
Spain	47.91	...	...
United States	80.68	...	...
Total from all countries	252.11	299.03	117.12
Fly paper:			
Germany	17.58	...	...
Great Britain	16.65	...	...
United States	90.89	...	...
Total from all countries	125.12	28.42	2.90
Building paper:			
Germany	6,548.20	...	...
Great Britain	423.32	...	...
Austria-Hungary	201.84	...	...
United States	51.09	...	...
Total from all countries	7,977.63	8,375.04	3,009.00
Blotting paper:			
Germany	17.02	...	...
Great Britain	71.84	...	...
Belgium	22.50	...	...
United States	140.97	...	...
Total from all countries	273.45	288.01	124.74
Tissue paper:			
Germany	145.90	...	...
Sweden	53.20	...	...
Great Britain	28.28	...	...
United States	1.33	...	...
Total from all countries	321.67	272.68	104.74
Matting paper:			
Germany	300.71	...	...
France	233.05	...	...
Great Britain	132.44	...	...
United States	17.38	...	...
Total from all countries	826.93	861.77	209.70
Paper for all other uses:			
Germany	465.77	...	...
Great Britain	134.81	...	...
Belgium	99.33	...	...
United States	34.54	...	...
Total from all countries	980.49	961.84	468.13

ROSARIO.

From Consul William Dawson, jr.

This consular district includes the entire northern part of Argentina, everything north of the Rio Colorado with the exception of the Province of Buenos Aires and the Territory of Pampa Central. It has a population of 3,500,000 to 4,000,000. Foreign manufactured products consumed in the district are with few exceptions either imported at Rosario or introduced by way of Buenos Aires. At the present time Buenos Aires is undoubtedly the principal distributing center for this district, particularly for highly manufactured products.

DIRECT IMPORTATIONS AT ROSARIO.

Generally speaking, there are at the present time four firms at Rosario engaged in the regular importation of various kinds of paper. All of these firms also do job printing. Only one of them imports on a large scale. The others import writing and printing paper in lots ranging up to 20 tons—usually, however, much smaller—and buy other kinds of paper from large distributers in Buenos Aires. There are in addition concerns which occasionally import particular kinds of paper, but do not carry on a general business in this line. Local firms importing directly generally buy through European commission houses.

One of the firms mentioned above states that it is restricting its import business every year and finds it more advantageous to buy all kinds of paper from Buenos Aires importers. The tendency appears to be in this direction. Two large Buenos Aires jobbers are represented here and the others naturally keep in close touch with local printers and retail paper dealers, of which there are a large number.

Outside of Rosario there is practically no direct importation of paper in this district. Dealers and consumers at interior points find it easier and more profitable to draw their supplies as they are needed from Buenos Aires. This enables them to buy about as cheaply and relieves them from the necessity of placing large orders and carrying stock.

CREDIT FACILITIES.

Terms of payment differ largely according to factories and customers. Recognized credit is 90 days from receipt of bill of lading, and the practice of not presenting draft until arrival of merchandise is well established. European, and particularly German, exporters are as a rule willing to afford all possible facilities in order to get trade, and regular customers of good standing receive up to 180 days from arrival of goods. A new firm not well established would, on the other hand, probably have difficulty in securing over 90 days from arrival of bill of lading. The question of credit facilities presents all possible variations, depending on eagerness of manufacturer for market, demands and standing of customer, abundance of bank credit, etc. In general, it may be said, however, that 90 days from arrival of merchandise is considered satisfactory.

HOME PRODUCTION.

According to the industrial census, closed June 30, 1909, there were at that time two paper mills in this district, one in the Province of Santa Fe, with a capital of $4,200 and 12 to 20 employees, and the other in the Province of Cordoba, with a capital of $85,000 and 50 employees. The first mill reported an annual output of $12,700 and consumption of raw material valued at about $6,000, of which two-thirds came from Argentina. The mill in the Province of Cordoba gave value of raw material used at $30,000, half of which was produced in the country and half imported.

The following data has been secured covering the second factory in this district, located at Andino, in the Province of Santa Fe:

The mill employs at the present time on an average 20 operatives earning from $1.06 to $2.12 a day. (According to census figures given above, the factory had 12 employees in 1909.) Skilled paper makers are not to be had and employees get their training at the mill. Argentina operatives with a certain amount of experience make skillful workmen. The number of employees is subject to more or less variation. At harvest time most of the workmen leave the mill to work in the fields. When paper bags are made women and children are engaged, bringing the number of employees up to 30 or 40. The factory makes only wrapping and similar papers. Raw material consists of paper cuttings and occasionally rags, both bought here, and wood pulp and cellulose imported from Germany. Flax, wheat, and corn straw, which are very plentiful here, have been tried unsuccessfully.

Water power taken from the Carcarana River is used. Paper-making machinery is of Italian make. German turbines are also used. The plant, while small, pays high dividends.

IMPORT TRADE—GERMAN HOLD ON MARKET.

With the exception of carbon, sketching, filter, photographic, cigarette, toilet, fly, and blotting paper, Germany is the leading source of supply for all kinds of paper and cardboard imported into Argentina. Out of total imports of paper of all kinds (not including, however, manufactures of paper), valued at $5,505,000 (valuation for customs purposes), in 1912 just about one-half, or $2,755,000 worth, came from Germany.

The German paper industry has a good hold on the Argentine market. Aside from all considerations of quality, price, and commercial skill, the German export trade in paper has two important factors in its favor, particularly as compared with American competition. In the first place, German exporters have a frequent and regular steamship service from German ports to the River Plate at rates which are considerably lower than those from New York to Buenos Aires. The second factor is the strong German influence in the printing and allied industries. From the start German firms have played an important rôle in the introduction and development of printing on a large scale in Argentina. The Compañia Sud Americana de Billetes de Banco (South American Bank Note Co.) grew out of a German printing establishment. The leading Argentine trade directory is published by a German firm. The best-known importers of paper and printer's supplies are German concerns. A German house, founded in 1867, first printed commercial books in Argentina on a large scale. A host of other German concerns, large and small, have been influential in the development of the graphic industries in Argentina and incidentally the importation of German paper.

Import trade in and market for paper of different kinds is discussed in detail below. No statistics showing imports of paper into this district are available. In order to convey an idea of distribution of import trade among the different producing countries, figures have been prepared based on average imports for the five years from 1908 to 1912, showing percentage received from the leading sources of supply. While these figures are necessarily taken from statistics showing imports into the entire country, they may be considered as applying quite accurately to this district, comprising as it does half the country and being supplied with paper largely through Buenos Aires. These figures will be quoted below with reference to different kinds of paper.

WRITING PAPER.

Very little writing paper is imported here from the United States. Of the writing paper imported, according to official statistics for the entire country covering the five-year period from 1908 to 1912, 48 per cent came from Germany, 19 from Italy, 13 from England, and only 2 per cent from the United States. Forty-four per cent of the writing paper imported with envelopes in boxes came from Germany, 25 per cent from France, 16 from Italy, and 2 per cent from the United States.

Writing paper is imported here extensively in sheets 18.1 by 22.8 inches; headings are printed and sheets are cut in four for pads, this being the form most common for commercial correspondence, clubs, hotels, etc. Best grades of paper are imported from England, Italy, France, and to a slight extent from the United States; middle and cheaper grades from Germany, which gets the bulk of the trade. Following prices (factory prices exclusive of freight and duty) are quoted by a leading firm which imports direct: High-grade English linen, ruled, $2.86 to $4.14 per ream of 18.7 pounds, or 15.3 to 22.2 cents per pound; French linen, 11 cents per pound; American linen, 12.2 cents per pound; German paper, ruled, made of cotton rags, 6 to 9.2 cents per pound. Of course, a great variety of different kinds of writing paper is used here, and the above prices are only to be taken as indicative of grades most in demand. Local taste favors English paper, and it is pointed out that demand for cheap German paper is to be attributed in part to its close resemblance in outward appearance to the fine English linens. On the whole, a good grade of paper, generally white, is used for commercial purposes. The specific duty making no distinction between different grades of paper tends to lessen the incentive to use cheap products. Writing paper is not manufactured in this district.

Letter paper, as distinguished from that imported in large sheets, is imported as a rule already put up in boxes. It appears that some firms import paper, envelopes, and boxes separately, although this is not the usual practice. Fine grades of letter paper are imported from France and Italy, middle grades from Germany, which here again receives the lion's share. Demand is chiefly for white paper. Paper in boxes is purchased largely in small lots from Buenos Aires importers at prices ranging from 25 to 60 cents a box (wholesale price). Of course cheaper and more expensive grades are also to be found.

One local dealer recently imported a lot of cheap letter paper from the United States, costing $5 per 100 boxes of 25 sheets and 25 envelopes. He states that this paper cost $7.43 per 100 boxes placed in the store and is being retailed at 14 cents per box. Italian paper purchased from the factory at 42½ cents per box costs the importer, duty paid, 48 cents.

Study of statistics for recent years reveals the fact that imports of American writing paper are increasing as compared with those from other countries. This is true especially of letter paper imported in boxes. Increasing demand for American letter paper indicated by statistics is confirmed by dealers. One local firm which started importing paper about a year ago states that it has just received an order of medium-grade letter paper from the United States which it is going to repeat, as it finds ready sale.

BOOK AND SIMILAR PAPERS.

Market for this class of paper is almost exclusively in the hands of German and native manufacturers. Argentina factories located in the vicinity of Buenos Aires make a cheap white paper sold to printers and jobbers at an average price of 6.6 cents per pound. This paper is used extensively here for job printing.

Very little book printing is done in this consular district, the large concerns of this kind being located in Buenos Aires. There is consequently no demand here for high-grade book paper or India paper.

Blank books are, however, made here by at least two firms, which employ for this purpose almost exclusively German paper. The grade most in demand for blank books is a well-appearing cotton rag paper sold by German factories at 6.8 cents per pound. English paper is used very little for blank books, as it is considerably higher in price than the German product, which is considered attractive and satisfactory.

A local job printer and paper importer states that he recently bought a large supply of paper for printing catalogues from Sweden. This paper, with a satin finish, imported in sheets 29.1 by 43.3 inches, weighing 59½ pounds to the ream of 500 sheets, costs (factory price) 4.6 cents per pound and is considered satisfactory.

A job printer states that while imported paper superior in quality to that made by Argentina factories can be placed in the shop at a fraction of a cent above cost of the native product, paper importers here who are also job printers find it more advantageous to buy from Argentina factories, which will deliver paper of any size in any quantity, whereas foreign paper has to be ordered in large amounts to make direct importation worth while.

On the other hand, another importer considers the home product practically as good and considerably cheaper than imported paper.

While the opinions quoted differ as to the quality of Argentina paper, they agree with respect to its preferential use for job printing and similar purposes.

Figures for the five-year period from 1908 to 1912 show that 82 per cent of the paper classed as "papel de obras," including book and job paper, came from Germany, 8 per cent from England, and only 1½ per cent from the United States.

NEWS PAPER.

The leading local daily, with a circulation of 20,000 and an average edition of 18 sheets 19 by 26 inches, has used American paper for three years. Previously Argentine, English, German, and Swedish paper had been used. American paper placed at Rosario costs, according to the manager of the paper, 4.38 cents per pound. It is a little more expensive than German paper but gives better results. The purchasing agent of the daily in question states that his paper has a large modern rotary press and that cheaper papers can not be used to the same advantage with this equipment, as they tear more easily. Paper is purchased in rolls of 660 pounds, and an average of about 10 rolls a day is used by the concern. American news paper is purchased from the Buenos Aires representative of an American factory.

The second largest daily at Rosario and in this district, with a circulation of 15,000 and an average edition of 16 pages approximately 19 by 26 inches, is using German paper at the present time. It has used other papers, including American. The manager states that the paper used at present costs 3.5 cents per pound placed at Rosario. From 250 to 300 rolls are used a month. The paper is purchased under contract from a German importing house with a branch office at Rosario.

There are two German importers of paper and printer's supplies represented by branch houses at Rosario. Most of the smaller papers, of which there are a considerable number throughout the district, buy from these or similar firms in Buenos Aires and are using chiefly German paper at the present time.

According to customs statistics for the five-year period from 1908 to 1912, 42 per cent of news paper imported came from Germany, 33 per cent from the United States, and 11 per cent from Sweden. A comparison of the figures for the different years shows that imports from the United States have increased rapidly, and this is confirmed by persons familiar with the paper market here.

Newspaper is not manufactured in this district, so far as can be ascertained.

WRAPPING PAPER.

Cheap brown paper, called here "papel de estraza," is manufactured in the country. It is made sometimes of rags but more frequently of cellulose or other imported raw materials. It is carried here largely by wholesale grocers and is generally delivered by factories in bales weighing 22 pounds cut up into sheets 18 by 14 inches (usual size). Factory price is from 3 to 3½ cents per pound.

On account of the high duty, foreign wrapping paper can not compete in cheap grades. None of the wholesale grocers who supply retailers with paper handle any imported paper. A certain amount of better grades of wrapping paper is used, although the demand is not large. Some manila paper is imported from Germany.

Statistics for the five-year period from 1908 to 1912 show that 48 per cent of imported wrapping paper came from Germany, 14 per cent from the United Kingdom, 13 from France, and only 2 per cent from the United States.

The duty on wrapping paper, equivalent to a specific duty of about 3½ cents per pound—approximate price at which Argentina factories sell it—is, of course, prohibitive. A reduction of duty on wrapping paper would undoubtedly result in a considerable increase of imports.

WALL PAPER.

The demand for wall paper in this district is limited by the fact that interiors of many houses are frescoed instead of papered. In some cases walls are plain with a simple border at top and bottom, in others a design is applied with a stencil.

According to official statistics for the entire country covering the five-year period from 1908 to 1912, 44 per cent of wall paper imported came from Germany, 23 per cent from France, 17 from Belgium, and 3½ per cent from the United States. Wall paper is not manufactured in this district. It is imported here by one concern which, in addition to Germany, France, and Belgium, buys considerable quantities in England. American wall paper is not sold here. It appears that some years ago the representative of an American manufacturer visited Rosario but, as far as can be learned, was unsuccessful in placing orders. Reasons given are difference in size, lack of conformity to local requirements with respect to color and design, and unsatisfactory quality. It is stated here that American wall paper is made of wood, is apt to spot, and tears easily. It is stated that American wall paper is imported to a slight extent at Buenos Aires. It does not appear, however, that it has found its way into this district.

Cheap papers are imported from Germany, fine qualities from France. Paper is imported in rolls 26 feet 3 inches long and 1.64 feet wide. English paper imported is 8 yards long and 1.84 feet wide. This is also acceptable. Wholesale price (factory price exclusive of freight and duty) varies from 3½ cents per roll for cheap grades of German paper to $1.90 for fine French designs. Pale shades and half tints with striped design are preferred. It is claimed that American papers seen here were too "loud." French styles are preferred and high-class paper most in demand comes from France. Cheaper German paper follows French designs.

Terms are very liberal, ranging from 120 to 180 days from arrival of goods, especially in case of regular customers. Large orders are often divided, partial payments running from 120 to 180 days.

There is only one dealer here who buys directly from foreign factories. Other local dealers order from importing houses in Buenos Aires.

TISSUE PAPER.

Tissue paper comes chiefly from Germany. According to figures covering the five-year period from 1908 to 1912, 51 per cent of tissue paper was imported from Germany, 9 per cent from Sweden, 8 from Italy, and only 4½ per cent from the United States. Principal paper dealers here handle German tissue paper exclusively. The article most in demand is imported in sheets 30 by 44½ inches and costs (factory price) 5.2 cents per pound.

The demand is chiefly for white tissue paper. Straw-colored paper is imported to a slight extent, other colored paper very little. The paper described above is used chiefly for wrapping. Finer paper for letterpress books and similar purposes is not imported to any considerable extent. One importing house which makes blank books finds it more profitable to import letterpress books already made.

BLOTTING PAPER.

American blotting paper is given the preference here. According to official statistics for the five years from 1908 to 1912, 50 per cent of blotting paper imported into Argentina came from the United States, and tendency is toward increased American participation in this line of import trade. During the period in question 24 per cent of blotting paper inported came from the United Kingdom and 11 from Germany.

One leading paper importer at Rosario handles American blotting paper only. Another firm imports American, English, and German paper. Colors preferred are white, pink, and gray. The standard size sheet is 19 by 24 inches. A good grade of blotter is used for most purposes. The dealer first mentioned above buys almost entirely American blotting paper costing (factory price) 5.8 cents per pound.

Blotting paper with paper or thin board covering is also imported chiefly from the United States, and is used extensively for writing pads made up here. Average price for this article is 21 cents per pound (factory price).

CLOTH-LINED PAPER, BINDER'S PAPER, PARCHMENT, ETC.

The demand for cloth-lined paper is very small here. As far as can be ascertained, it is not imported directly, but purchased in small quantities from Buenos Aires importers. As a result, local dealers are not accurately informed as to source of supply, although it is supposed to come from England. Cloth-lined paper is not shown separately in custom statistics.

There is practically no demand for cover paper here. According to official statistics covering the five years from 1908 to 1912 imports of paper for bookbinding were insignificant, and no paper of this kind was imported in 1912 (last figures available).

There is practically no demand for parchment. Small amounts of imitation parchment of German make are used.

The demand for sketching and other paper used by artists and designers, which is purchased through Buenos Aires, is small at Rosario. Paper most commonly used by artists and amateurs is a medium stiff paper, sold in rolls 10.9 yards long and 57 inches wide and retailing at $3.82 per roll. There is, however, not a large demand at Rosario for sketching and similar papers of any kind. This class of paper comes chiefly from Italy, Germany, and France.

WAX PAPER.

Wax paper is used here only in very light grades. It is imported from Germany and used for wrapping confectionery and similar articles.

In place of wax paper a light, rather resistant paper of French manufacture is used to a small extent. It is imported in reams of 500 sheets, 25.6 by 39.4 inches, the ream weighing 42 pounds. Factory price, exclusive of freight and duty, is stated to be 12 cents per pound, and cost of paper placed in the store at Rosario 16.8 cents per pound.

Imports of wax paper are not shown separately in customs returns.

CARBON PAPER.

English and American carbon papers are most popular here. According to statistics covering the five-year period from 1908 to 1913, 45 per cent of carbon paper imported came from England, 35 per cent from the United States, and 13 per cent from Germany. A comparison of figures for the different years shows that imports from England have increased rapidly. This is confirmed by investigation here. A firm with headquarters in Buenos Aires states that after testing different kinds of paper it now imports its own brand put up in boxes bearing its label by an English factory. American carbon paper for typewriter is also carried by this firm, as well as most other dealers handling paper and typewriter supplies. Standard qualities of English and American carbon paper retail at $3.60 per box of 100 sheets (cap size).

The demand for carbon paper is good. A dealer states that tendency is to use considerable quantities and to renew carbon paper frequently. Fine carbon paper for typewriter is imported almost exclusively put up in boxes. It has been tried to import it in large sheets to be cut up here, but on account of its perishable nature, especially when exposed to great heat, this does not give good results and losses practically equal whatever may be saved. Cheaper qualities of carbon paper used by railroads, department stores, etc., are imported in large sheets.

CARDBOARD.

Cardboard is not manufactured in this district. Board of various kinds is imported chiefly from Germany. Customs statistics group cardboard of different descriptions into two classes—"cartulina," including Bristol and similar products, 68 per cent of which imports came from Germany during the period from 1908 to 1912 and 13 per cent from Spain (only 1 per cent from the United States), and "carton." As respects "cartulina," so-called ivory finish is most in demand here. This is slightly transparent and costs 6.4 cents per pound (factory price) imported in sheets 19.7 by 25.6 inches. Bristol most commonly used costs 5.1 cents per pound (factory price) and is also imported in sheets 19.7 by 25.6 inches. These are both German products. Bristol and similar boards are, of course, imported in other sizes and qualities. There are two local firms which import directly.

Heavy cardboard of different kinds classed as "carton" in customs statistics comes chiefly from Germany (53 per cent during the five-year period from 1908 to 1912, against 21 from the Netherlands, 10 from Sweden, and 2 per cent from the United States). This is purchased chiefly from importers in Buenos Aires in a considerable variety of thicknesses and sizes, costing (wholesale price), 3.1 cents per pound. The only local firm importing directly, as far as is known, states that cheap strawboard is imported from Holland and finer board, made from old newspapers, from Germany.

TOILET PAPER.

Toilet paper is used to a considerable extent by middle and well-to-do classes. As it is not manufactured in this district, nor, as far as is known here, in this country, the market for imported papers of different descriptions is good. According to customs statistics for the whole country covering the five-year period from 1908 to 1912, 31 per cent of imports came from England, 27 per cent from Germany, and 25 per cent from the United States. Although a comparison of statistics for recent years shows a slight increase in imports from the United States as compared with other countries, little American paper appears to be sold here. The largest dealers, the department stores, do not carry it. Of some five or six firms seen only one handles American toilet paper, sold in rolls slightly larger although more loosely packed than English and German papers, at 12.7 cents per roll (retail price). This paper is purchased in Buenos Aires, and the dealer states that it sells well and is handled by a number of small stores here.

The best-known brands sold here are imported from England. Toilet paper is sold almost exclusively in rolls, the usual size being about 5 inches wide and 3½ to 4 inches in diameter and weight about 240 grams (1 gram = 0.03527 ounce). Some brands can also be obtained in packages. Toilet paper retails at from 11 to 25 cents per roll. Cheap paper, for which the demand is naturally largest, comes from Germany. The manager of a large department store states that his firm carries only German paper retailing at 11 to 17 cents per roll and that the largest demand is for crepe paper. Better grades of English and American paper are generally plain and very little crepe paper is to be found in hotels, clubs, or houses where more expensive papers are used. It appears that scented papers are not in demand. A German brand which finds a good market has a large green label covering entire side of roll. As a rule, however, labels are plain and packing resembles more or less closely that used in the United States.

Toilet paper is imported directly or bought in Buenos Aires. Some of the large consumers, especially department stores, buy from foreign manufacturers without intervention of middle men. In such cases paper is generally imported with label of local firm with or without name of factory. Druggists buy in Buenos Aires.

The use of toilet paper, as well as high-class sanitary apparatus, is increasing here. Were it not for the present high duty, which makes price prohibitive for certain classes of the population—the cheapest paper on the market retails at 11 cents the roll—demand would undoubtedly be larger.

FLY PAPER.

American fly paper finds an excellent market at Rosario. According to customs statistics covering the whole country for the five-year period 1908 to 1912, 79 per cent of fly paper imported came from the United States, 12 per cent from the United Kingdom, and 9 per cent from Germany. The leading dealers at Rosario handle American fly paper only and no German or English paper has been seen here. The paper used is exclusively of the sticky variety. Poisonous papers are not known here. American fly paper retails at 47 cents per package of 25 double sheets.

Fly paper is carried by department stores, hardware dealers, druggists, etc. It does not appear that it is imported directly here. All the firms seen buy through Buenos Aires, where at least one of the favorite American brands is sold by an exclusive agent.

In view of the tremendous quantities of flies which the protracted summers and long dry spells render doubly obnoxious, the market for fly paper should be capable of a considerable increase. A crusade for the extinction of flies has been proposed at Rosario, which should tend to increase the demand for fly paper. Curiously enough, very little fly paper is to be found in restaurants, where electric fans are relied on extensively to combat flies.

Customs statistics show that importation of fly paper has increased rapidly in recent years.

SANDPAPER.

American manufacturers get a good share of the trade in sandpaper in this district. The better grades are imported largely from the United States. Following sizes are used here: Nos. 0, ½, 1, 1½, 2, 2½, and 3. Sandpaper is imported in reams of 400 and 440 sheets. Average price (factory) paid by importers for American sandpaper is $1.35 per ream of 440 sheets plus 10 cents for packing. Size of sheet is 10½ by 8½ inches.

Cheap sandpaper is imported from Germany, the German article being considered inferior to the American. According to customs statistics for the entire country covering the five-year period 1908 to 1912, 39 per cent of sandpaper imported came from Germany, 34 per cent from the United States, and 13 per cent from Spain. It appears, however, that more American sandpaper is used here than German. As far as can be ascertained, no Spanish sandpaper is used here and there is no home production.

The duty on sandpaper is very high. Dealers state that at the time the present tariff went into effect factories existed at Buenos Aires which it was intended to protect but they have since been closed.

Sandpaper is imported directly by leading hardware dealers.

PHOTOGRAPHIC PAPER.

According to official statistics for the five-year period from 1908 to 1912, inclusive, 43 per cent of photographic paper imported came from England, 35 per cent from Germany, and 18 per cent from the United States. At that time imports from the United States showed a marked tendency to increase. It appears, however, from information furnished by local dealers, that the market has undergone a great change in the last three years. One dealer in particular states that, in his opinion, 70 per cent of the photographic paper now used at Rosario comes from Germany, the balance from the United States and England. This dealer reviews the situation substantially as follows:

> Up to four or five years ago English paper with a satin finish was used to a large extent. American paper, particularly platino bromide, aristo platino, and various kinds of velox, also found a good market, along with German paper. Within the last three years, however, German factories have made tremendous strides and are at the present time driving rival papers out of the market. The American aristo platino is being practically abandoned because its preparation does not seem to be as careful as formerly. It fails to bring out the deep tones. The German chloro bromide is cheaper and easier to work with than English and American papers and gives excellent results. To give an example of difference in price, we sell similar qualities of German and American paper as follows (retail prices): Roll of 12 sheets, 19.7 by 23.6 inches, German paper $3.82, and American $5.01; and we make a larger profit on the German paper. We make less difference in price between German and American paper sold in small quantities, but profit on German paper is in this case still larger. Recently a new Dutch paper similar to the German article has been introduced and is doing well. We are visited frequently by German salesmen who offer us credit for six months and even longer from arrival of goods in order to place orders.

Photographic paper is imported directly here by one concern. There are in addition a number of firms with main offices in Buenos Aires which maintain branches in Rosario. The local branches are supplied from Buenos Aires. Paper of this kind is handled by photographic supply houses. It is not manufactured in the district.

CIGARETTE PAPER.

No American cigarette paper is sold here. According to customs statistics covering the five years from 1908 to 1912, 64 per cent of cigarette paper imported came from France, 12 per cent from Austria-Hungary, and 9 per cent from Germany.

French and Spanish papers find the best market here. A little Hungarian paper is to be found, no German. Dealers attribute imports credited to Germany in official statistics to French shipments via Hamburg, or possibly to paper imported by cigarette factories.

Local trade prefers the fine French papers which retail here at 5 and 10 centavos a package (2.1 and 4.2 cents). These papers are sold by Buenos Aires jobbers to local retail dealers, who are not, however, large consumers, at following prices: Ordinary grade of French paper retailing at 2.1 cents the package, $1.34 the box of 100 packages; best grade French paper retailing at 4.2 cents the package, in two sizes, $1.61 and $1.95 per box of 60 packages, respectively. There is no internal-revenue tax on cigarette paper.

CONCLUSION—EXTENSION OF AMERICAN TRADE.

The only lines in which American paper manufacturers are at the present time getting their share of trade are carbon, news, photographic, toilet, sand, fly, and blotting paper. Of these, news, toilet, and fly paper are received here, as far as can be ascertained, exclusively through agents or importers in Buenos Aires. Sandpaper is imported directly by leading Rosario hardware dealers. Photographic paper is received here directly from the United States by one dealer in photographic supplies. Carbon and blotting paper, as well as small quantities of other kinds of paper, are both imported directly from America and purchased from Buenos Aires distributers.

All of the numerous dealers interviewed in gathering information for this report emphasize the fact that American salesmen are seldom seen here, whereas those of other nationalities, especially Germans, visit the city at frequent intervals. One dealer importing a general line of paper states that in five years he has been visited by two American salesmen, both of whom received small orders, but did not return. On the other hand, a number of American manufacturers spend considerable sums in keeping local dealers supplied with attractively gotten up catalogues which are admired but bring in very little trade. In competition with paper actively pushed by salesmen who offer every facility to prospective customers, articles which have to depend on catalogues, which may or may not be carefully read, are obviously at a great disadvantage.

In addition to high freight rates and shipping facilities inferior to those of European competitors, principal obstacles to extension of American trade are the strong hold of German manufacturers on the market discussed above and a rather conservative tendency on part of local dealers and customers. Dealers state that they find it difficult to induce customers to try anything except the particular grade of paper they are in the habit of using.

While many people are inclined to think that Rosario will in the near future be the chief distributing center for northern Argentina for all kinds of goods, this is not at the present time the case. As noted above, Buenos Aires is now the principal distributing center for this district, particularly for highly manufactured products. Probably the best way of working this territory would, for the present at least, be through a general agent in Buenos Aires who could cover Argentina, Paraguay, and Uruguay, establishing branch agencies as need might arise. Some American paper is already being handled in this way. It would seem feasible to intrust a good sales organization of this kind with several different noncompeting lines which would be sold in most instances to the same customers. This would reduce cost of making sales and make it worth while for an agent to push American paper throughout the territory.

IMPORT TARIFF.

The effect of the Argentine tariff on paper, which is in fact a high specific duty, exceeding in many instances the value of the product (according to statement of leading local importer) is to greatly reduce consumption of imported paper of the kinds manufactured n the country. The principal products of Argentina mills are common grades of wrapping and printing paper. Other kinds of paper have to be imported. While a lower duty would undoubtedly tend to facilitate the importation of paper, the effect of a decrease in tariff rates on demand for foreign paper should not be exaggerated. Such a reduction would naturally greatly increase the demand for foreign paper in grades manufactured in Argentina. Other kinds of paper are already imported in considerable quantities in spite of the high tariff. While high prices naturally tend to limit consumption, it should be remembered that all manufactured commodities are very expensive here and paper finds a market at prices which would be prohibitive in other countries. The high tariff, which is in reality specific and does not distinguish between different grades of same kind of paper, weighs naturally less heavily on the better qualities.

FUTURE OF INDUSTRY.

Several authors, among others Jules Huret, "De la Plata a la Cordillere des Andes," and Schmidt and Grotewold, "Argentinien," prophesy a considerable future to the paper industry in Argentina. Favorable predictions are based on the raw material at hand in the shape of straw of different cereals which can be obtained in almost unlimited quantities, as well as wood and rushes. Schmidt and Grotewold mention two Argentine patents for the manufacture of paper from flax fiber and the castor plant, respectively. Flax is cultivated here exclusively for the seed and no use is made of the fiber, which is burned.

With respect to the present condition and future of the Argentine paper industry, substantially the following statement has been obtained from a gentleman excellently informed on the subject:

> The Argentine paper industry subsists at the present time, thanks to a high import duty which alone enables our factories to compete with the foreign product. Paper is made on a very small scale in this district, and while factories pay good dividends it is doubtful whether this would be the case if manufacture was carried on on a larger scale. Suitable raw material is difficult to obtain in the country. There are no important textile plants in this district and supply of rags is very limited. Experiments made with wheat, flax, and corn straw have not given satisfactory results and have been abandoned. The same is true of attempts made to use willow and poplar pulp in other parts of the country. Failure is probably due to the high cost of production with available equipment. Raw material has to be imported to a considerable extent. Labor is high and there is practically no industrial population in this district. Machinery has to be imported at considerable expense. Under such circumstances Argentina paper could not possibly compete with the foreign product manufactured in countries with abundant raw material on a large scale by skilled labor were it not for the high duty. The industry is artificial and is not likely to grow rapidly under present conditions.

BRAZIL.

RIO DE JANEIRO.

From Consul General Julius G. Lay.

Brazil is a very large and increasing consumer of paper of nearly all kinds, the greater part of which is now imported from abroad, principally from Germany, Norway, Sweden, and Belgium. The paper imported from France is manufactured in Belgium.

The manufacture of paper up to the present time has been limited practically to wrapping paper, but as there is an abundance of fiber in Brazil available for the manufacture of paper, never yet exploited, as well as wood suitable for pulp to be found in several of the southern States, the national production in years to come will probably displace some of the other grades of foreign papers. At present, however, Germany is selling in this market paper of the various kinds demanded at such low prices that Brazilian paper will probably not take its place for some time to come.

Printing paper, news paper, writing paper, and other kinds such as cardboard, carbon, wax, tissue, etc., are most in demand in Brazil, in the order named.

MARKET REQUIREMENTS.

Writing paper.—Writing paper is imported in the following sizes: 36 by 44 centimeters and 66 by 88 centimeters (centimeter = 0.3937 inch). It is uniformly used for petitions and requisitions to the various Government departments, such as the customhouse, the municipality in the matter of taxes, etc., for contracts, deeds, and other instruments. The greater part of it is ruled, resembling our folded foolscap paper, but is slightly larger, and is folded like a book. A small portion of this paper is of good quality bond, most of which comes from England. The bulk of the more common grades comes from Germany.

Book papers.—Following are the sizes and weights per ream of 500 sheets of book papers used in this market (centimeter = 0.3937 inch, kilo = 2.2 pounds): 68 by 98 centimeters, 38 kilos; 82 by 110 centimeters, 52 kilos; 62 by 95 centimeters, 36 kilos; 70 by 50 centimeters, 26 kilos; 55 by 75 centimeters, 29 kilos; and 65 by 45 centimeters, 18 kilos.

Most of this book paper is imported from Germany. It is packed in heavy paper, 250 sheets per package, but not in boxes. These packages, flat, in turn are packed in burlap coverings, the two larger sides of the package (the same dimensions as the paper itself) being covered with light pine boards and the whole strapped together with iron bands. The net weight of these packages is 200 kilos, and the gross weight about 218 kilos. It apparently reaches this market in good condition. This is a very important point for American manufacturers who contemplate entering this market to observe. Practically all the book papers imported here are white. There is no demand for Bible or India papers.

The price of German paper for the manufacture of blank commercial books averages about 70 marks ($16.66) per 100 kilos (220.4 pounds) f. o. b. port of loading.

Printing paper.—Practically all of the printing paper is imported from Germany. This class of paper is used for catalogues, circulars, as well as for blank books, letterheads, etc., and is imported in the following sizes, termed "BB" and "AA," respectively: 66 by 98 centimeters; and 76 by 112 centimeters. Local importers state that the reason American printing paper is not acceptable to the local trade is because American manufacturers do not manufacture it in the sizes above specified, which are demanded by local printers. Each of the above sizes of printing paper comes in the following grades by weight of 500 sheets: 18, 24, 30, 36, 40, and 50 kilos, net weight. The color is usually white. This paper is shipped in packages of 250 sheets each, and packed in the same manner as book paper, already described.

The cost of printing paper to local importers averages about 40 marks ($9.52) per 100 kilos (220.4 pounds), c. i. f. Rio de Janeiro, although some is sold as low as 35 marks ($8.33) per 100 kilos.

News paper.—All of the news paper is imported from Norway and Sweden. It is consumed by the 12 or more daily newspapers in Rio de Janeiro and the dailies in other cities along the coast—Para, Pernambuco, and Bahia, and interior cities of importance, such as Sao Paulo and Bello Horizonte. Some news paper is also used in the printing of very cheap books, resembling our paper-covered novels. An insignificant amount of news paper has been manufactured in the State of Sao Paulo.

Wrapping paper.—Although formerly wrapping paper was imported, it has in recent years been displaced by paper locally manufactured. The factories in the State of Sao Paulo supply this market at present.

The prohibitive import duty of 500 reis per kilo, equivalent to about 9 cents per pound, excludes foreign wrapping paper, except a very small quantity coming from Sweden, as it can not compete with the local product selling at 500 to 800 reis (16 to 26 cents) per kilo (2.2 pounds).

Tissue paper.—Very little tissue paper is imported here, the greater part of it coming from Germany. White predominates, although some colored is also used. It comes in dimensions of 45 by 58 centimeters and 51 by 76 centimeters, and in two grades; the cheaper grade in packages of 400 sheets, weighing 3.6 kilos per ream; and the better grade in packages of 500 sheets, weighing 3.1 kilos per ream. The latter is used principally in the manufacture of press copy books, which can be made cheaper here than imported. (Centimeter = 0.3937 inch; kilo = 2.2 pounds.)

Carbon paper.—Considerable carbon paper is used in the larger commercial centers of Brazil with increased use of typewriters and modern commercial office equipment—coming from the United States and Germany. American carbon paper is slightly more expensive than German.

Blotting paper.—Blotting paper is now imported from England, Germany, and Austria, although formerly some was received from the United States, which has lost its place because of cheaper European blotting paper. The size is almost uniformly 50 by 65 centimeters, pink or white, and English blotting paper costs local importers 3¾d. (7.6 cents) per pound f. o. b. Southampton.

Wax paper.—Wax paper is imported from Germany and is used principally for wrapping such food products as butter, biscuits, chocolate, and cheese. It comes both white and colored, white predominating.

Toilet paper.—American toilet paper is sold in Brazil in large quantities, but it appears that even in this class of paper the Germans are making an effort to undersell the American manufacturer. The size is usually 16½ by 11 centimeters, and that packed in packages of 500 sheets is preferable to that in rolls. An American manufacturer recently lost an order to a German firm for 50,000 rolls of toilet paper because of the price.

Cardboard and millboard.—The principal sources of cardboard and millboard are Germany and Holland, although Brazilian factories are now producing this class of paper to some extent, supplying local paper-box factories.

Envelopes.—Although there are several factories in Sao Paulo and Rio de Janeiro, equipped with German machinery and using German and some national paper of a cheap grade, in the manufacture of envelopes, and in spite of the very high customs duties, large quantities of German envelopes of all grades are imported into Brazil.

These envelopes are sold f. o. b. port of sailing as low as 1.25 marks (30 cents) per thousand, in boxes of 500 each, these envelopes being of various colors, white more expensive.

Social and commercial paper.—Commercial correspondence paper is usually of a medium grade, although some of the better linen and bond commercial papers are now finding a market here.

All grades of social correspondence paper are to be found in local stores, the bulk of which comes from Germany because of the extremely low price. German note paper comes in boxes of 25 and 50 envelopes and folded sheets, packed in cardboard boxes with colored cover pictures, in turn packed in tissue paper. A local importer showed a representative of this consulate general some social note paper, packed in boxes of 25 envelopes and sheets of paper, with specially stamped covers of famous paintings, as "The Reapers" and others, which was furnished by a German manufacturer at 35 pfennigs (8⅓ cents) per box. The retail price of this paper is 1,000 reis (32 cents) per box. These note papers are imported from Germany as cheap as 18 pfennigs (4.2 cents) per box and up to 4 marks (95 cents) per box, the price depending upon the quality of the paper and envelopes, as well as the type of box used.

American social bond and linen papers are meeting with favor in Brazil, although their sale is necessarily limited because of the high retail prices.

Stiff paper, usually of a dull finish, and resembling a transparent wax paper, is used for visiting cards and is imported from Germany and Italy.

Wall paper.—Wall paper is extensively used in Rio de Janeiro and in general through the south of Brazil, although in the extreme north its use is more limited because of the humidity of the climate. Wall paper is manufactured here to some extent, but the better grades are imported. It comes in rolls 8 yards long and 18 inches wide from Europe and the United States. There is no special kind in particular demand with regard to color or design.

HOME PRODUCTION.

A recent publication states that there are 17 paper mills in Brazil, employing 606 hands, with a capital of 5,083:000$000 ($1,644,859), and an annual production of 3,987:000$000 ($1,290,193). Of these there are not more than six important mills. The paper industry in Brazil is still in its infancy, although the continued commercial development of the country will undoubtedly mean the extension of the paper industry and the ultimate local manufacture of many classes of paper entirely imported at present.

A local paper mill at Sao Paulo, equipped with American machinery, manufactures writing paper and cardboard from Brazilian pulp wood and rags.

An effort was made to manufacture news paper in Brazil, but was unsuccessful because the low duty on this product was not sufficient to enable the news made in Brazil to compete with importations from Norway and Sweden. Paper is now manufactured in Brazil from the refuse of sugar cane, grasses, reeds, locally grown wood pulp, etc., and the most useful plant used is the "pirini" (*Papyrus brasilienis*).

IMPORT TRADE.

The following statistics show the trend of trade in foreign papers in this country and the importations for 1912 and 1913 as classified by the Statistical Bureau at Rio de Janeiro:

Kinds and principal countries of origin.	1912	1913
Writing paper:		
United States	$12,974	$11,232
Germany	220,869	263,701
Italy	75,365	64,660
Austria-Hungary	52,558	50,454
Total, all countries	425,648	473,048
Printing paper:		
United States	13,595	19,583
Germany	881,228	917,234
Sweden	392,487	326,156
Norway	391,851	447,547
Netherlands	140,016	248,980
Belgium	111,916	137,552
United Kingdom	61,101	77,877
Total, all countries	2,107,646	2,385,947
Cardboard and millboard:		
United States	$4,413	$4,303
Germany	261,009	296,310
Netherlands	86,108	103,138
Total, all countries	451,045	526,538
Paper unenumerated:		
Germany	686,785	598,041
Austria-Hungary	78,030	85,564
Belgium	41,864	56,412
United States	63,926	66,505
France	76,135	114,543
Great Britain	79,804	72,620
Italy	89,063	109,537
Norway	111,574	79,624
Sweden	150,273	150,964
Total, all countries	1,419,091	1,380,157

No paper is exported from Brazil.

CREDIT TERMS.

European paper exporters, as a rule, give credit of from 90 to 120 days from date of arrival of steamer bringing the goods, and some even six months. Some local houses carry an open account with European manufacturers, although many purchase through local commission houses.

American manufacturers now supplying a limited amount of bond papers usually insist on cash against documents, and local firms purchase through New York commission houses.

SUGGESTIONS TO AMERICAN MANUFACTURERS.

All European manufacturers send a traveling representative to this market at least once each year to hold their share of the trade. This is a very important factor in favor of German selling methods. American manufacturers can not expect to enter this market now and displace the Germans, who have already secured a foothold, by means of correspondence and catalogues. They should send a capable traveler, thoroughly informed regarding paper, with a complete set of samples, and a thorough knowledge of the Portuguese language. European travelers come here year after year with a few samples of new types of paper they have to offer, meet local paper importers personally, learn their wants, hear their complaints, and rectify the factory's errors. Some successful European manufacturers have a local agent through whom local houses place their orders, and this, in addition to a visit by their traveler each year, enables them to hold their business.

Local importers, while not prejudiced against American paper, state that they would not care to change their connections after they have been doing their purchasing from Germans for so many years. A large importer informed this office that he recently had an experimental shipment come from the United States, gave explicit instructions that the paper was to be folded in a certain way, and when it arrived it was folded exactly the opposite, thus rendering it practically useless for the purpose for which it was intended, thus subjecting the importer to great inconvenience; that the packing was very carelessly done and a large part of the paper was rendered useless because of the manner in which it was tied with a stout cord, wearing away the edges of the paper wherever it was so exposed.

Local importers have cited examples of European travelers calling on them for business and being willing to supply paper of any kind in any weight, size, and finish, while, on the other hand, the few American travelers representing paper manufacturers in the United States who have visited this market have said that their company can not deviate from the standard sizes to which their machinery is set. It is perfectly obvious that American manufacturers can never expect to enjoy a greater part than the very trivial share of the paper business trade they are now securing in this market unless they are willing to conform to the sizes and qualities demanded by local printers who have their presses purchased and set to meet certain types of paper.

American manufacturers might be able to compete in certain kinds of paper and quote prices as good or better than Europeans, but large importers here prefer to place their orders in bulk with as few manufacturers as possible, thereby reducing their expenses in shipment to Brazil, clearance from the customs, claims for damaged goods, etc. Probably this is one of the reasons why German carbon paper is gaining a foothold here, whereas formerly American carbon paper seemed to have been sold almost exclusively.

It is not believed that the orders which could be received immediately would be sufficient to justify an American paper factory to establish a branch office here, but the proper plan would be to have an active representative with an office in this city, representing, say, five or six other American allied but noncompetitive lines.

In the preparation of this report a representative of this consulate general had occasion to visit various importers and was shown quotations made by American paper manufacturers, the prices being quoted according to English measurement and weights. These quotations were practically disregarded, as local importers are not inclined to go to the trouble of converting all these figures into the metric system, when the European manufacturers make their quotations in the metric form. It is absolutely necessary for American manufacturers to make quotations in the metric system, using centimeters for dimensions and kilos for weights. Quotations may be made in American currency and should be either f. o. b. New York or c. i. f. port of destination.

The method of packing printing and other paper already described is also an essential element in the paper business here and a point which local importers observe very carefully.

PERNAMBUCO.

From Consul Merrill Griffith.

From 90 to 95 per cent of all the paper used in this section of Brazil is imported from Germany and Norway, the prices of American paper being generally too high to successfully compete with them.

The demand here is for news paper, wrapping paper, writing paper, cardboard, blotting, and cheap varieties of fancy papers used for sundry purposes.

The United States sends chiefly blotting paper and carbon paper, but during the last two years has sent several rolls of news paper. All the wall paper comes from Rio de Janeiro, where there is located a large factory and printing establishment. The designs are attractive and the prices range, according to quality, from 400 reis (13 cents) up.

The duty on all paper imported is levied according to weight and quality. In this connection it may be pertinent to state that, as the duty on printed paper in one color is practically the same as the duty on white paper (unprinted), nearly all the printing is done in Europe. The duty on two-color work is very high.

There are no paper mills in this consular district. There may be, however, some vegetable fibers in the interior accessible and perhaps suitable for the manufacture of paper, but the resources of this section in this particular field have never been exploited. Some rags were exported to France during 1913, but the quantity was rather insignificant, amounting in all to only 3,000 pounds.

As there are no reliable statistics available here, it is impossible to even approximately estimate the amount of paper imported during last year, but the greatest amount is consumed by the three large printing establishments and by the seven daily newspapers, none of which has a large circulation. A few years ago all the wrapping paper used here was purchased in the United States, but the trade has been diverted to Norway and Germany on account of cheaper prices.

Taking the last two or three years as a criterion, the American trade in paper is this consular district has been slowly increasing. Our share, however, is quite insignificant and there seems to be no logical reason why it can not be augmented. The Brazilians are not prejudiced against American-made goods. They are only interested in buying the best quality for the lowest prices. The most advantageous and satisfactory way for the American manufacturer who is seriously considering extending his business in Brazil is to send out, in the first place, a competent representative thoroughly conversant in Portuguese in order to study carefully and critically trade conditions. He should be an expert qualified to accurately judge the quality of the goods sent out from Europe and now on the market here in order to be able to make a fair comparison with those of his own manufacture. If this be inconvenient, then the manufacturer may make use of trade circulars and catalogues printed in Portuguese, with all the sizes, weights, etc., stated in the metric system.

The chief factors influencing trade are the following: Goods sent as ordered, good qualities, cheap prices (considering quality), well packed, quick deliveries, and at 90 days sight. The prices may be quoted f. o. b. New York, or c. i. f. destination. Owing to the quality and weight in paper, it is often more advantageous to the buyer to have the prices quoted c. i. f. Pernambuco.

SANTOS.

From Consul Maddin Summers.

The three principal classes of paper imported into this territory are news paper, glazed writing paper, and good quality writing paper.

News paper.—In 1912 there were 6,867 tons of this material imported into Santos. Of this quantity, Germany furnished 54 per cent; Sweden, 21 per cent; Netherlands, 8 per cent; Norway, 4 per cent; and the balance from various other countries. The United States share was 0.2 per cent. In 1913 there were 8,190 tons imported from countries as follows: Germany, 43 per cent; Netherlands, 22 per cent; Sweden, 16 per cent; Belgium, 6.1 per cent; United States, 0.1 per cent; remainder from various other countries. This material is shipped in sheets or reels and costs about $5.80 per 220 pounds f. o. b. Santos, at the present market prices.

Cheap glazed and good writing paper.—It is impossible to obtain figures on these two products separately, but the greater part is of the first mentioned. The following are the figures for the years 1912 and 1913: The total amount imported was 472 tons, of which in 1912 Germany furnished 62 per cent; Italy, 16 per cent; Austria-Hungary, 10 per cent; Great Britain, 5 per cent; France, 4 per cent; United States, 1 per cent. In 1913 Germany supplied 66 per cent; Austria-Hungary, 20 per cent; Italy, 5 per cent; Great Britain, 4 per cent; Netherlands, 3 per cent; France, 2 per cent; and the United States, 2 per cent.

The cheap glazed paper is packed in reams of 500 sheets each. The most popular size is 25.98 by 37.80 inches, weights 39.6, 44.8, 55.1, 66.1, and 88.2 pounds per ream.

Commercial correspondence paper.—The most popular size of this material is 11.2 by 7.9 inches. There is such a wide variety of sizes and weights of social correspondence paper that it would be impossible to give any definite data. Most of this, however, comes from France and Germany and is the same as imported into the United States from those countries.

Paper boards.—These come principally from the Netherlands, which country has for a long time enjoyed this trade. This also applies to fine cardboard, such as used for visiting cards.

Wall paper.—This is imported to a small extent and comes entirely from Great Britain and France. There were only 16 tons entered through this port during the past year.

Blank books.—In 1912 there was $125,000 worth of this material entered here, from the following countries: Germany, 17 per cent; Portugal, 17 per cent; Italy, 29 per cent; France, 15 per cent; Spain, 12 per cent; and the United States, 8 per cent. In 1913 the United States took the lead in this commodity by shipping 40 per cent. Italy shipped 15 per cent, Portugal 12 per cent, and France and Great Britain each 10 per cent.

In printed forms the United States did not figure, as practically all of these were sent to branch houses by their head offices in Europe. Nearly all the important European countries have branches of their most important banks here, which in itself accounts for much of such material.

There are two or three small paper mills in the city of Sao Paulo which make wrapping paper only. They use pulp imported from

Sweden. This industry is fostered by a very high protective duty on the class of materials which they produce. There is no wrapping paper imported.

There is an abundance of fiber material for the manufacture of paper. On account of the labor difficulties and also transportation, no one has gone into this business on a large scale.

Quotations.—These must always be sent in German money, as this business has been practically controlled by the Germans for so long that every dealer is familiar with German coinage. Weights and measures must be in the metric system.

Terms of sale are 90 days dating. This will absolutely have to be carried out. It does not mean that the dealer will accept a draft, with documents attached, at 90 days' sight, but that where a man is not quoted on this basis by all European houses, with whom Americans have to compete, his credit is so bad that it would be advisable to make him pay in advance. The Brazilians are a very sensitive people, and unless these terms of sale and methods of quoting are absolutely carried out to the letter, it is useless to compete for this business.

BRITISH GUIANA.

From Vice Consul Lester W. Collins, Georgetown.

British Guiana furnishes a very small market for paper, especially of the better classes. Most of the importations are of British manufacture, or purchased through English houses. American paper of all grades is suitable for this market.

Yellow straw wrapping paper, of which a great quantity is used, is of the cheapest possible quality and is manufactured in Holland. Other wrapping papers are obtained principally from Norway and Sweden.

All paper for newspapers is at present obtained from or through Great Britain. A slight prejudice exists against pure white news stock, local consumers preferring a slight cream color.

American standard sizes are not suitable for this market, which is accustomed to the use of English standards. The paper in general use for social and commercial correspondence is of low grade.

The colony has enormous forests, but none of the wood has as yet been used for the manufacture of paper. There are no paper mills and no exports of paper.

Paper and paper manufacture imports in the fiscal year 1910–11 amounted to $44,163, and in 1911–12 to $40,727. About one-third of this came from the United Kingdom and practically all of the rest from Europe. The importations from Canada in those two years were, respectively, $1,862 and $1,019.

In the calendar year 1912 paper and paper manufacture importations from the various countries were as follows: United Kingdom, $12,966; Canada, $714; United States, $412; Germany, $3,684; Sweden, $235; France, $1,998; Netherlands, $15,989; Austria, $40; total, $36,038.

Between 120,000 and 150,000 pounds of newspaper stock are used annually. Prices and samples should be sent direct to the consumer. Terms are usually 30 days.

CHILE.

VALPARAISO.

From Consul Alfred A. Winslow.

There is a growing demand in Chile for practically all kinds of paper and there is a good future for these lines, since only the coarser wrapping paper is manufactured in the country, and that not in sufficient quantities to supply the demand. It would seem that American interests might get a very much greater portion of the paper trade of this country than is indicated by the following tables, showing the imports, by countries and classes, in pounds, for the years 1910, 1911, and 1912:

Articles and countries.	1910	1911	1912
Blotting paper:	*Pounds.*	*Pounds.*	*Pounds.*
France	10,032	3,718	6,699
Germany	90,046	53,086	64,838
United Kingdom	32,274	42,636	46,772
United States	33,198	34,540	87,472
Other countries	10,912	30,404	9,944
Total	176,462	164,384	215,725
Cigarette paper:			
France	4,236	12,540	13,310
Germany	361,152	384,054	445,566
United Kingdom	25,410	42,218	37,004
United States	33,154	....	1,012
Other countries	101,376	87,362	183,524
Total	525,328	526,174	680,416
Coarse wrapping paper:			
France	726	30,558	33,462
Germany	320,342	453,640	859,540
United Kingdom	14,190	7,620	14,300
United States	858	6,776	11,396
Other countries	141,768	124,300	243,210
Total	477,884	622,894	1,161,908
Copying paper:			
France	908	272	3,174
Germany	36,071	7,944	35,404
United Kingdom	17,853	8,976	17,094
United States	6,355	9,845	8,808
Other countries	8,224	294	4,077
Total	69,411	27,331	68,557
Cover paper:			
Belgium	....	19,448	12,441
France	869	4,609	77
Germany	70,400	56,023	98,329
United Kingdom	9,449	5,190	2,673
United States	990	6,324	20,790
Other countries	11,517	34,881	8,645
Total	93,225	126,475	142,955
Drawing paper:			
France	2,723	8,074	3,177
Germany	38,416	40,814	55,473
United Kingdom	15,307	19,569	33,255
United States	3,865	3,916	5,931
Other countries	2,971	488	9,783
Total	63,282	72,861	107,619
Gilded wall paper:			
France	4	....	514
Germany	6,422	2,461	9,748
United Kingdom	371	1,403	759
United States	....	....	46
Other countries	6,000	123	....
Total	12,797	3,987	11,067
Light-weight wrapping paper:	*Pounds.*	*Pounds.*	*Pounds.*
France	24,068	49,874	36,641
Germany	1,183,721	1,727,418	1,464,815
United Kingdom	53,119	64,625	95,194
United States	18,436	36,377	59,301
Other countries	83,402	68,453	88,737
Total	1,362,746	1,946,747	1,744,688
Monogram paper:			
France	1,001	847	1,177
Germany	14,311	12,650	15,444
United Kingdom	10,527	14,267	12,078
United States	517	2,244	8,140
Other countries	59,863	31,636	1,089
Total	86,219	61,644	37,928
Music paper:			
Belgium	11,825	....	2,398
Germany	11,913	1,540	5,676
United Kingdom	5,753	24,195	2,992
United States	....	....	....
Other countries	....	22	1,089
Total	29,491	25,757	12,155
Printing paper:			
France	32,956	104,478	146,102
Germany	11,900,658	13,825,526	20,735,159
United Kingdom	2,444,362	1,972,629	1,147,077
United States	8,943,374	11,095,601	5,013,316
Other countries	1,252,339	1,095,336	257,928
Total	24,573,689	28,193,570	27,299,582
Tissue paper:			
France	3,185	4,668	1,749
Germany	73,807	68,109	55,457
Italy	2,059	2,477	550
United Kingdom	424	1,212	7,062
United States	134	....	....
Total	79,609	76,466	64,818
Toilet paper:			
France	4,202	4,917	2,839
Germany	54,362	54,747	45,045
United Kingdom	29,920	45,034	57,442
United States	81,103	88,950	85,844
Other countries	1,001	1,804	1,265
Total	170,588	195,452	192,435
Tracing paper:			
France	88	484	37
Germany	2,063	4,879	3,357
United Kingdom	3,291	1,656	2,874
United States	1,007	165	451
Other countries	231	....	6
Total	6,680	7,184	6,725

Articles and countries.	1910	1911	1912
Various classes of paper:	*Pounds.*	*Pounds.*	*Pounds.*
France	9,218	20,119	25,823
Germany	179,363	263,821	469,389
United Kingdom	25,751	14,445	31,552
United States	30,067	31,992	30,292
Other countries	22,892	45,216	57,846
Total	267,291	375,593	614,902
Wall paper:			
France	69,612	68,928	299,156
Germany	1,249,872	1,384,988	1,659,306
United Kingdom	265,207	312,419	322,570
United States	22,688	51,999	32,381
Other countries	77,398	27,454	155,080
Total	1,684,777	1,845,788	2,468,493

Articles and countries.	1910	1911	1912
Wrapping paper:	*Pounds.*	*Pounds.*	*Pounds.*
France	19,074	24,002	19,481
Germany	485,298	472,208	1,133,284
United Kingdom	22,638	33,418	25,909
United States	10,802	7,722	21,868
Other countries	41,690	60,170	41,646
Total	579,502	597,520	1,242,188
Writing paper:			
France	15,906	37,003	44,715
Germany	469,841	468,941	907,841
United Kingdom	284,658	293,898	480,682
United States	89,078	167,622	301,895
Other countries	194,029	194,733	275,868
Total	1,053,612	1,162,197	2,011,001

PAPER SIZES.

Practically all sizes of print and book papers are imported, but the prevailing size is 30¼ by 43½ inches. This seems to cut to the best advantage to meet the demands of the trade. Most of the news paper comes in rolls of various lengths and weights, from 35 inches wide, weighing 462 pounds, to 70 inches wide, weighing 959 pounds.

The larger sizes of bond, ledger, and linen papers seem to be preferred for the reason that they cut to better advantage and the dealer is not required to carry such a large stock, i. e., from 23 by 36 to 27 by 34 inches. Cardboards are usually 20 by 25 inches, while strawboards generally measure 25 by 30 inches, and the average wrapping paper 36 by 46 inches. Comparatively little of the better grades of paper are imported, with a majority below the medium in most lines. Wall paper comes in the usual size double rolls, and there is an increasing consumption.

CREDIT TERMS.

American papers in the main stand well in Chile, and the principal reasons why American paper interests have had no greater portion of this business have been prices and terms of credit, the latter very often being the item that lost the sale, for more than one-half of the paper stocks from Europe come in on six months' credit and most of the balance cash against shipping documents in Chile. Freight rates have been in favor of the European trade, but from now it will doubtless be in favor of the American shipper when the matter of time is taken into consideration.

There are no raw materials gathered in this country and no paper is exported. It is said there are large quantities of fairly good pulp timber in the southern part of the country, but to date no practical use has been made of it.

So far as I am aware, none of the departments of the Chilean Government purchase any paper save on bids submitted after tenders have been asked for by notices published in the Diario Oficial de la Republica de Chile, printed at Santiago, Chile. The time of notice varies from 30 to 60 days, so that in order to make a bid an American paper house must have an agent on the ground. Sometimes bids are asked for specific lots, and again on what is needed of certain lines for one or two years.

IQUIQUE.

From Consul Percival Gassett.

The total amount of paper imported into Iquique annually is small; it consists principally of news, wrapping, and writing paper, and comes mostly from Germany, England, and the United States. The amount of each imported and the sources of supply are fully shown in the following table:

Articles.	Total.	From Germany.	From United Kingdom.	From United States.	From other countri es.
Writing paper	$7,725	$2,904	$2,030	$520	$2,271
Envelopes	6,042	3,012	1,245	43	1,742
Document, draft, and check paper	6,433	383	1,305	1,296	3,449
Binding paper	197	118	32	15	32
Drawing paper	345	216	82	30	19
Ledgers in blank	7,033	4,928	1,835	33	237
Books of invoices, bills	766	408	215	74	69
News paper	37,896	30,502	1,299	1,006	5,089
Wrapping paper	9,905	3,665	1,088	233	4,919
Paper bags	1,764	331	256	1,076	101
Wall paper	4,784	2,210	2,009	....	565
Tracing paper	930	361	255	215	99
Tracing colored paper	1,290	578	251	90	371
Tracing copying paper	1,375	640	498	54	183
Press copy books	3,559	2,738	649	172	....
Blotting paper	234	122	35	66	11
Toilet paper	1,793	462	913	418	....
Oiled paper	261	124	109	15	13
Carnival paper	610	610	....	....	....
Cardboard of all kinds, calendars, boxes, albums, etc	8,718	4,011	1,249	1,935	1,523
Press board	1,289	920	54	15	300
Postal cards	2,311	1,149	721	78	363
Menu cards	379	215	128	36	....
Playing cards	2,373	155	33	821	1,364
Telegraph paper	381	....	162	219	....
Music paper	152	76	58	....	18
Music, pianola	454	239	85	130	....
Photograph paper	2,855	219	756	1,708	172
Cigarette paper	1,752	1,161	416	....	175
Filter paper	51	22	20	9	....
Fly paper	1,383	330	21	1,032	....
Roofing paper	2,162	....	572	1,590	....
	117,202	62,809	18,381	12,929	23,085

CREDIT TERMS.

The method of quoting prices is generally f. o. b. port of shipment and terms are, as a rule, 90 days and sometimes 120 days after presentation of bill of lading and acceptance of draft. Some houses here pay cash in advance in Europe, obtaining a discount of 2½ per cent and thereby saving the 6 and even 7 per cent interest charged by manufacturer for the 250 days' time over which the credit extends. The banks charge for collection one-fourth of 1 per cent.

PUNTA ARENAS.

From Consul Charles L. Latham.

The paper supply of the Territory of Magallanes is entirely of foreign origin. The Territory is the southernmost political division of the Republic of Chile, with a population of approximately 24,000, of which nearly 18,000 are resident in the city of Punta Arenas, the principal urban center. The paper supply is ordinarily imported directly from foreign countries rather than from or through other commercial centers of Chile, the Territory being distant from the other principal ports several days' sea journey, and having a separate import customs tariff. There are no jobbers or middlemen exclusively or principally engaged in importing papers for wholesale, and the importations are made from the world centers of production directly by the retailers and consumers, and ordinarily in small lots.

Writing paper is found in the local retail market to range through all usual colors, sizes, and qualities, with preference toward thin and lined varieties, and is sold in boxes, blocks, or tablets, in paper packages or by the quire or ream. Prices range from 10 cents United States currency per tablet of a hundred sheets of ruled paper to 1 cent per sheet for special or extra-finished letter paper.

Other retail prices that are current at this date, but which are hardly sufficiently fixed to be termed as market ones, are as follows: Book paper, for ledgers, record books, etc., $6 per hundred pounds; print paper for books, $3.60 per hundred pounds and $1.60 to $3 per 500 sheets; news print paper, $2.10 per hundred pounds; wall paper, from 7 cents to $1.10 per roll; letterpress copying paper, 20 cents per package of 100 sheets; blotting paper, from $3 per 500 sheets to 3 cents per sheet; cardboard or strawboard, $2 per hundred pounds; bookbinding paper, $5 to $6 per thousand sheets; paper for drawings and plans, 5 to 30 cents per large sheet; visiting cards, 20 cents per thousand; cards for invitations, etc., $5 to $8 per thousand; envelopes, $0.80 to $1.60 per thousand; thin colored paper for pamphlet covers, $3.30 per 500 sheets; and tissue paper, $1.40 per 500 sheets. An average price of the wrapping paper usually sold here is $4.80 per hundred pounds.

STATISTICS OF IMPORTS.

The imports, in pounds gross weight, of the principal classes of paper into the Territory of Magallanes during 1912 are shown in the following table:

Classes of paper.	From Germany.	From United Kingdom.	From United States.	From other countries.	Total.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Writing paper	11,557	8,265	22	3,693	23,537
Envelopes	4,740	1,190	88	2,237	8,255
Postal cards	2,366	84		145	2,595
Paper for drawings, plans, and photographs	1,105	44	44	192	1,385
Books, blank record	15,289	298	31	1,007	16,625
News print paper	115,941			58,321	174,262
Print paper for circulars, posters, etc.	49,626	44	154	3,660	53,484
Wrapping paper	16,131	624	2,998	12,727	32,480
Paper bags	8,457	247	3,027	9,657	22,388
Wall paper	25,199	13,759		14,021	52,979
Blotting paper	1,870	132			2,002
Paper for bookbinding	165				165
Tracing paper		639		9,550	10,189
Carbon paper	218	137	101	192	648
Copy-press paper	291			44	335
Copy-press books	5,734				5,734
Cardboard, etc.	10,703	284		2,070	13,057
Cards, visiting, etc.	1,102			1,526	2,628
Cigarette papers	22	220		5,112	5,354
Toilet paper	2,253	1,411		88	3,752

The great bulk of the paper imported is of German manufacture. Great Britain supplies substantial proportions of the writing paper and wall paper, Norway of print and wrapping paper, and the substantial sales of American paper are practically limited to those of paper bags and wrapping paper. The local market offers American manufacturers an opportunity for increased sales of wrapping paper and for sales of print papers at prices that are competitive with those received from the present sources of supply. A good market for wall papers of the best qualities can be developed by proper efforts on the part of American manufacturers. The usual credit terms granted local importers, either by the foreign seller or through the medium of foreign commission houses vary from 60 to 90 days from date of shipment.

Freight rates and facilities from European sources of supply are superior to those from the United States, but not so much so as to make competition impossible. Steamers direct from Germany and England maintain practically a weekly calling schedule from those countries, the voyages averaging one month. Steamers from New York direct to this port via the Atlantic call at unscheduled dates to the number of three or four a month.

COLOMBIA.

From Consul Henry P. Starrett, Cartagena.

The market for paper of all classes in this district is limited to the medium and low grades of light weight, there being practically no market for high-grade paper of any kind. While no official statistics are available as to the total amount imported, it is estimated that the annual consumption of paper in this consular district amounts to approximately 100 tons, of which about 30 tons is news paper. It is further stated that the present supply is obtained from Germany and the United States in about equal quantities. There is no domestic production of paper.

The importations of paper and stationery into the port of Cartagena during the fiscal year ended June 30, 1914, amounted to $144,435, and were apportioned as follows: Germany, $52,426; United States, $51,830; Spain, $12,664; England, $9,828; France, $8,584; other countries, $9,103.

MARKET REQUIREMENTS.

Bond, linen, and ledger papers are imported to a limited extent only, the source of supply being Germany and the United States. The demand is for low and medium grades of light weight and soft finish. Standard sizes are used, there being no special requirements as to this feature.

The book papers used are of the most ordinary variety, many of the book publications being printed on common news paper, bound with heavy paper covers. The news paper is of low grade, light to medium weight, and of rough finish, coming in standard size sheets. Wrapping paper of the fiber variety is most commonly used, with a small market for manila. Practically no wall paper is imported and there is no apparent demand for kraft paper. All the above are of low grade and standard size. There is also a limited demand for colored tissue, ordinary blotting, light-weight cover, and ordinary carbon papers. No cloth-lined, wax, or parchment papers are imported.

TREND OF MARKET AND TERMS.

It is worthy of note that until a few years ago practically all of the paper importations into this district came from Germany, through Belgian commission merchants, whereas to-day American exporters are supplying at least one-half of the total trade. It is believed that greater activity on the part of the American manufacturer and a more liberal credit policy would eventually secure a much larger proportion if not all of the trade of this district.

German paper exporters allow from 6 to 8 months open credit to reputable merchants here, while American houses offer only 60 to 90 days, in some few instances with open crèdit and in others with 60 and 90 day sight drafts, shipping documents attached. Prices are usually quoted f. o. b. New York or German or Belgian ports.

Due to the tariff stipulation of specific duties according to weight and regardless of value, there is a tendency of restricting importations to the lighter weights in all grades of paper. For this reason the paper-consuming public has adjusted its needs to this condition, and it is very rare indeed to find any type of heavy bond, parchment, or other highly finished paper in use, even among those who are in a position to afford the use of such high-grade material. Many business firms have their letterheads and envelopes engraved in Paris on excellent bond or linen paper, and this constitutes the only high-grade stationery in use.

Very little headed, engraved, or embossed paper is imported, owing to the high import duty, which is: Paper of whatever size or quality, with address, monogram, or printed heading, lithographed or engraved, not otherwise specified, 30 cents per kilo; ordinary letter paper, ruled or unruled, in sheets or tablet form, 17 cents per kilo gross weight; printing paper, white or colored, in sheets not less than 60 by 90 centimeters, the value of which does not exceed $10 gold per 100 kilos, free; same as above but valued at more than $10 gold per 100 kilos, 3 cents per kilo. There is in addition a surtax on the above articles of 2 per cent of the duty. (Centimeter = 0.03937 inch; kilo = 2.2 pounds.)

ECUADOR.

From Consul General F. W. Goding, Guayaquil.

The volume of the paper trade of Ecuador has gradually increased from 1,669,904 pounds, in 1905, to 2,733,846 pounds in 1911. Germany has ranked first in importations for many years, the position of the United States varying until the year 1911, when its paper trade ranked second only to Germany, although even then its sales were but one-fourth those of that country. Germany's prominence in the trade of Ecuador is due largely to the number of its enterprising citizens engaged in business here who, while naturally pushing German-made goods, include many articles in their stocks manufactured not only in the United States, but elsewhere.

At one time a considerable quantity of lithographic work for Ecuador was done in the United States; but a few years ago several local printers visited that country, where they learned the art, returned to Ecuador, and established themselves in business. This has had a restrictive influence on the imports from the United States, at the same time largely increasing the volume of trade in printers' materials of all classes, nearly all used in Ecuador being of American manufacture.

MARKET REQUIREMENTS—HOME PRODUCTION.

The quantity of paper used in Ecuador is shown in detail in a table which follows, those most in demand being news paper, satin paper (for wrapping), cigarette paper, writing paper and envelopes, wrapping paper, wall paper, with a good demand for tissue paper and imitation wood paper, paper bags, and cardboard.

Special efforts should be made to increase the sales of colored paper, envelopes, and writing paper, lithograph paper, photograph paper, paper napkins, toilet paper, imitation wood paper, and cardboard and paper boxes.

It is learned, after careful inquiry, that there are no standard sizes or special requirements other than a fine quality of writing paper for commercial and social correspondence. No two of the several newspapers issued are of similar size, all sizes being equally desired. As a rule the quality of all classes of paper in use is of high grade, the wrapping paper being the best made. As a number of magazines and books are published in Ecuador paper suitable for them should find a ready sale.

Paper is not manufactured in Ecuador and there are no paper mills of any character. While the trees here have not been studied with a view to ascertain their value as a source of paper pulp, it is reasonably certain that immense numbers could be used for that purpose. Rags and old paper are not conserved, as there is no demand for them, although large quantities are destroyed every year which could be purchased if desired.

IMPORT TRADE.

The following tables show the imports of paper into Ecuador for the years 1910 and 1911, the most recent data obtainable:

Paper.	From Belgium.		From France.		From Germany.		From Spain.	
	1910	1911	1910	1911	1910	1911	1910	1911
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Bags	1,653		423		1,695	79	13	
Blank books		679	9,203	19,573	7,685	12,055	3,903	1,426
Blotting	192	1,896	40	150	443			
Bookbinding				2		2,328		5,739
Boxes	542		4,431	5,035	7,487	16,704	13	1,969
Carbon					18			
Cardboard		9,903	437	2,383	22,077	29,187		734
Cards	1,166	126	1,365	1,184	3,313	5,520	194	996
Checks			15					
Cigarette	2,521	2,275		520	12,650	5,379	108,575	174,002
Colored		2,114	140	35	2,725	4,293		
Copying		13	101	238	1,400	205	9	
Drawing	44	220	293	1,748	498	8,704		
Envelopes	3,840	6,044	2,271	6,168	23,950	40,812	90	62
Filter			130	66	1,038	1,213		542
Gilt			22	15	1,499	1,887		33
Labels	26	362	1,539	1,184	6,678	16,065	227	
Lace			13			194	11	
Lanterns					619			
Lithograph			84		1,651	617	20	20
Mourning						344		
Music			858	2,687	381	178		
Napkins					265	141		
News	256,214	105,939			290,482	266,667		
Packing	1,349		1,151	1,202	30,772	147,328		
Painting					11	21		
Parchment					95	366		
Photograph			150	401	20	7		
Playing cards	3,448	2,740	1,190		840		3,494	4,390
Post cards		761		93	143	406	75	33
Satin	93,363	11,343			111,210	138,296	419	3,979
Tinfoil			24	648	2,914	4,848		44
Tissue			291	33	33,803	29,919		
Toilet			101		42	1,933		
Wall	15,146	19,524	2,958	3,260	70,541	97,510		
Waterproof						1,759		
Writing	12,625	8,259	1,870	11,421	32,773	46,926	2,178	
Wood			582	20	17,493	270,840	1,852	
Wrapping		335	77	4,374	79,922	572,101		
Unclassified	575		346	2,582	8,514	13,293		
Total	392,704	172,533	30,105	65,112	775,647	1,738,125	121,073	193,969

Paper.	From United Kingdom.		From United States.		From other countries.		Total.	
	1910	1911	1910	1911	1910	1911	1910	1911
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Bags	231	....	63,675	108,489	281	....	67,971	108,568
Blank books	11,117	23,124	21,696	9,012	35	2,127	53,639	67,996
Blotting	399	203	4,960	1,927	....	3,655	6,034	7,831
Bookbinding	....	....	108	....	....	....	108	8,069
Boxes	1,909	3,849	2,474	7,848	921	231	17,777	35,636
Carbon	7	....	126	247	5	....	156	247
Cardboard	2,264	12.983	234	3,097	284	55	25,296	58,342
Cards	1,239	728	353	1,590	167	2,334	7,797	12,478
Checks	734	....	1,696	....	....	....	2,447	....
Cigarette	7,147	1,385	....	....	2,721	8,048	133,614	191,609
Colored	701	88	....	....	....	....	3,566	6,530
Copying	161	53	172	24	....	....	1,843	533
Drawing	....	220	....	....	....	....	835	10,892
Envelopes	4,592	3,785	2,002	62,578	992	1,292	37,737	120,736
Filter	115	....	75	159	....	....	1,358	1,980
Fiscal	9,376	....	....	....	....	....	9,376	....
Gilt	....	340	....	....	....	....	1,521	2,275
Labels	293	2,262	4,905	390	112	95	13,780	20,358
Lace	....	....	....	169	....	....	24	363
Lanterns	....	....	....	....	....	....	619	....
Lithograph	37	1,312	348	2,370	....	....	2,140	4,319
Mourning	....	....	....	....	....	....	....	344
Music	....	35	....	....	....	....	1,239	2,900
Napkins	33	....	9	29	....	....	307	170
News	8,008	28,911	34,456	122,859	1,629	....	590,789	524,376
Packing	668	17,352	1,766	15,906	....	5,533	35,706	187,411
Painting	....	....	....	....	....	....	11	21
Parchment	....	....	....	....	....	....	95	366
Photograph	139	49	66	22	....	55	375	534
Playing cards	705	1,074	694	1,292	5	9	10,376	9,505
Post cards	68	243	....	5	....	13	286	1,554
Satin	2,648	....	32,551	38,288	....	604	240.191	192,510
Tinfoil	....	....	11	18	....	1,252	2,949	6,810
Tissue	291	1,232	1,153	251	55	97	35,593	31,532
Toilet	459	2,108	4,642	6,949	....	....	5,244	10,990
Wall	8,485	15,285	1,870	9,164	11	....	99,011	144,743
Waterproof	134	....	49	....	....	....	183	1,759
Writing	26,285	15,311	18,590	18,674	8,101	16,943	102,422	117.534
Wood	22	40,421	1,700	3,097	2,266	1,922	23,915	316,300
Wrapping	38,433	26,510	573	3,618	454	902	119,459	607,840
Unclassified	871	1,625	392	79	721	306	11,419	17,885
Total	127.571	200,488	201,348	418,146	18.760	45,473	1,667,208	2,833,846

Of the imports under "Other countries," $15,090 worth in 1910 and $39,810 worth in 1911 came from Italy.

The gain in the trade with the United States occurred in paper bags, paper boxes, carbon paper, cardboard, cards, envelopes, filter paper, lithograph paper, paper for periodicals, packing paper, playing cards, satin paper for wrapping, paper serviettes, tinfoil, toilet paper, wall paper, imitation wood paper, and wrapping paper. The trade in writing paper has remained stationary and has decreased in blank books, bank checks, labels, and copying paper, partially explained in the introductory paragraph. However, the sales of paper from the United States is fairly satisfactory, and as the demand is increasing our merchants should be able to secure a good share of the future paper trade of Ecuador.

SHIPPING FACILITIES—PRICES AND TERMS.

The shipping facilities are equal apparently to all countries importing goods into Ecuador. The steamship lines arriving at the Ecuadorian ports are one American (under British flag), one British, one Chilean, one German, and one Peruvian, with no known discrimination in freight rates. After the Panama Canal is opened for traffic the freight charges should place the United States in a most satisfactory position, for goods can be landed from that country cheaper than from any other owing to its proximity.

Owing to excessive duties and surcharges the prices of paper are very high, but not so much so as to limit its use. The prices demanded are from 50 to 100 per cent higher than those quoted in the United States, the terms being cash with order or on receipt of documents.

PARAGUAY.

From Consul Cornelius Ferris, jr., Asuncion.

In that part of Paraguay lying west of the Paraguay River, a large uninhabited region known as the Chaco, there is an unlimited supply of palm trees of exceedingly fibrous texture probably suitable for the manufacture of paper. An American who recently visited the Paraguayan Chaco and who is familiar with the pulp wood from which paper is made in Canada is of opinion that this species of palm furnishes excellent material for paper making. Inquiry on the subject has been made of Prof. Charles Fiebrig, director of the Agricultural College of this country, who furnishes the following information:

> The best plants for the fabrication of paper in this country are the common species of palm, *Acrocomia totai*, *Copernicia cerifera*, then a good many creepers belonging mostly to the family Bignonæ; for instance, several species of *Arrabidæa*, *Adenocalymma*, and *Amphilophium*, and lastly some tall Graminæ like the *Bambusæ* and other *Tacuaras* and canes, growing specially in the forests of the Alto Parana. Finally, perhaps some abundantly growing *Bromelaceæ*, for example, *Ananas sativus*, *Bromelia serra*.

URUGUAY.

From Consul Ralph J. Totten, Montevideo.

The information and statistics given in this report are equally for the city of Montevideo and for the whole of Uruguay. All imports of paper come through this city and the local paper mill is the only other source of supply.

Paper imports for Uruguay, in the order of their importance, come from Belgium, Germany, Great Britain, the United States, and Argentina. Belgium, which leads in the total, supplies over one-third of the whole and sells the greatest amount of printing paper of all kinds and cigarette paper. Germany, second in the total, leads in blank books, envelopes, boards, wall paper, wrapping paper, and boxed writing papers. Great Britain leads in colored paper, bulk writing paper, and drawing paper. The United States supplies about 14 per cent of the total and stands third in the sale of printing and news paper. The local mill supplies more weight of paper than any of the importing countries. It makes low and medium grade commercial, printing, colored, and wrapping papers and is now putting in machinery for making high-grade paper.

The estimated amounts of the different kinds of paper used in Uruguay per year is as follows, by weight in avoirdupois pounds:

	Pounds.		Pounds.
Business forms	2,191	Printing	10,034,995
Blank books	71,947	Wrapping paper	1,854,774
Cigarette paper	180,642	Wall paper	166,803
Colored paper	998,463	Writing, box	97,346
Envelopes	193,508	Tissue	12,128
General writing	993,189		
Pasteboard	2,193,244	Total	16,799,230

The sizes of sheets generally used are as follows:

Writing paper, 58 by 90, 58 by 91, 59 by 92 centimeters (22.8 by 35.4, 22.8 by 35.8, 23.2 by 36.2 inches).

Book papers, 69 by 100, 72 by 92, 76 by 112, 81 by 118, 118 by 167 centimeters (27.2 by 39.4, 28.3 by 38.2, 29.9 by 44.1, 31.9 by 46.5, 46.5 by 63.8 inches).

News paper in sheets, same sizes as book papers, with the addition of a small quantity of 130 by 176 (51.2 by 69.3 inches).

News paper in rolls, widths 75, 85, and 95 centimeters (29.5, 33.5, and 37.4 inches).

Wrapping paper, 45 by 50, 55 by 58, 70 by 80, 106 by 140, 110 by 140 centimeters (17.7 by 19.7, 21.7 by 22.8, 27.5 by 31.5, 41.7 by 55.1, 43.3 by 55.1 inches).

Tissue paper, 58 by 98, 62 by 85, 75 by 98 centimeters (22.8 by 38.5, 24.4 by 33.5, 29.5 by 38.5 inches).

Carbon paper comes mostly from the United States and the sizes are our regular cap and letter sizes.

Blotting paper, 11.5 by 22.6 inches and 19 by 24 inches.

Pasteboard, 21 by 60, 23 by 60, 26 by 60, 31 by 60, 50 by 100 centimeters (8.2 by 23.6, 9 by 23.6, 10.2 by 23.6, 12.2 by 23.6, 19.6 by 39.3 inches).

Drawing boards, 42 by 61, 50 by 68, 61 by 81, 50 by 100 centimeters (16.5 by 24, 19.6 by 26.7, 24 by 31.9, 19.6 by 39.3 inches).

Envelopes are used in sizes $4\frac{1}{2}$ by $5\frac{11}{16}$, $4\frac{3}{4}$ by $5\frac{7}{8}$, 5 by $6\frac{1}{8}$, $5\frac{1}{8}$ by $6\frac{1}{2}$ inches and in the sizes corresponding to American official sizes.

Commercial writing and letter paper is generally of a medium grade, thin, tinted paper. Light grays and blues are much used with envelope to match. For social correspondence low and medium grade box note paper of German, English, or Belgian make is much used. Paper with pressed or printed lines is popular with the poorer people.

HOME PRODUCTION.

Uruguay has practically no timberlands. All wood or other pulp is imported from Norway and Germany. The better grade of local paper is made from cotton rags gathered in the country.

There is only one paper mill. It has a monopoly. Its annual output is estimated as follows: Colored paper, 907,746 pounds; general writing and commercial paper, 848,740 pounds; boards, 439,594 pounds; news and book paper, 736,088 pounds; tissue paper, 50,900 pounds; wrapping paper, 1,426,172 pounds; total 4,409,240 pounds. The labor employed is paid as follows: Men, unskilled, $1.24 per day; skilled, $3.31 per day; women, $0.51 to $0.83 per day; children, $0.40 to $0.62 per day.

The mill is being enlarged and improved. New machinery is being installed so that not only will the total output be greatly increased but it will be able to make much finer grades of paper. The machinery in use is of Belgian and German make. The new machinery which is being installed is German. Bids were received from American firms, but the prices were higher than the German prices.

The wholesale prices of paper of the different kinds is estimated as follows:

News paper, in rolls, per 220.46 pounds	$5.17–$7.00
Printing, in sheets, per 220.46 pounds	5.00– 8.50
Book paper, in sheets, per ream	3.00–16.00
Writing paper, per ream	2.00–11.00
Wrapping paper, per 220.46 pounds	5.00– 7.50
Pasteboard, per 220.46 pounds	5.00– 8.00
Tissue paper, per ream	2.00– 3.00
Blotting paper, per ream	12.00–18.00
Carbon paper, per 100 cap sheets	2.00– 4.00

Practically no paper is exported from Uruguay.

The total imports by countries of the different kinds of paper for the year 1912 was as follows in avoirdupois pounds:

Kinds of paper.	From Argentina.	From Belgium.	From Germany.	From United Kingdom.	From United States.	From other countries.	Total.
Business forms	315	40	620	719	189	308	2,191
Blank books	66	8,246	35,611	16,676	....	11,348	71,947
Cigarette paper	....	174,834	....	363	198	5,247	180,642
Colored paper	1,551	1,498	40,691	42,137	....	4,840	90.717
Envelopes	741	30,991	77,196	46,275	519	25,658	181,380
General, writing, drawing, etc	8,118	16,663	27,962	89,056	3,003	64,427	209,229
Music paper	....	....	1,126	946	....	....	2,072
Paper boxes	....	56	2,167	975	184	785	4,167
Pasteboard	306,064	67,882	800,276	60,471	183,660	326,151	1,744,504
News and book, in rolls and sheets	369,371	3,715,125	1,739,925	1,476,611	1,523,940	370,429	9,195.401
Wrapping paper	1,907	76,635	83,248	73,920	27,940	64,952	328,602
Wall paper	2,031	7,825	72,659	51,788	1.584	30,916	166.803
Writing, box	10,611	12,628	26,470	23,727	2,508	21,402	97.346
Total	700,775	4,112,423	2,907,951	1,883,664	1,743,725	926,463	12,275,001

Unquestionably the United States should get a larger share of the paper trade of Uruguay than it does at present. American paper is admitted to be equal or superior to the European article, but we do not seem to be able to compete. Our prices are higher, freights greater, and we do not give the terms desired. The paper interests of the United States should send an expert to study conditions in this part of South America. He could find out the requirements of the market, get samples and prices of the goods in demand, and then our mills could make an intelligent attempt to compete with the European product. One printer who gave me some information on paper asked me not to mention his name in my report. He said: "I have been buying my paper from an English firm for some time. It has the goods I want and the prices and terms are very advantageous. The American salesmen can not give me the same prices, freights, or terms, so why waste their time and mine?"

The imports of paper into Uruguay have steadily increased during the last few years, but the consumption has increased in even greater proportion. The local mill is getting the difference and is strengthening its hold on this market, especially in wrapping, colored, and low-grade printing papers.

The lack of American vessels carrying freight between the United States and the River Plate is a strong factor in this and other lines of trade. Much lower freights are quoted from Europe than from the United States, the difference averaging about $2 per ton. American news paper, formerly very largely used in this city, is rapidly losing ground due to this difference in freights.

The duty on wrapping paper, colored papers, and boards of $7.24 per 220.46 pounds plus about 9 per cent on a fixed value of 16 cents per 2.2 pounds is practically prohibitive.

Prices should be quoted f. o. b. or c. i. f. per 100 kilos (220.46 pounds). Terms generally given are 6 months net or 5 per cent cash.

VENEZUELA.

PUERTO CABELLO.

From Consul Herbert R. Wright.

During the fiscal year ending June 30, 1913, the imports of paper in this consular district were valued at 108,098 bolivars, equal to $20,863 United States currency. The imports of paper for the fiscal year 1912 were 136,137 bolivars, equal to $27,084.

The kinds of paper imported is shown in the tabular statement herewith attached. It can be seen that Germany has been the leading country in the paper market.

Articles.	From Germany.	From Netherlands.	From United States.	From France.	From other countries.
Blank books	$2,115	$116	$613	$386	$323
Commercial papers	598	107	92	201	....
Printing paper	....	51	1,716	....	....
Wall paper	292	....	335	....	....
Wrapping paper	8,410	3,428	402	466	1,210
Total	11,415	3,702	3,158	1,053	1,533

A paper factory is about to be established at Maracay, Venezuela. some of the machinery of which is at present on the wharf at this port. I understand the consignment of machinery, costing 201,565 bolivars ($38,902), was purchased in Germany. The plant is expected to be in operation in a few months and will no doubt have a telling effect upon the importation of paper in the future.

LA GUAIRA.

From Consul Thomas W. Voetter.

With the exception of a relatively small proportion of wrapping paper manufactured in Venezuela the consumption of paper of all classes is supplied from abroad.

Statistics regarding the importations of each variety are not obtainable but official reports give information in regard to print paper, wall paper, and also the other classes not otherwise specified. It will be seen by the following table that the United States furnishes some in each class, but leads in the supply of print paper. The statistics for the year 1914 are not yet available, but it is known that importations from the United States were proportionally greater during the latter part of the year on account of the country being cut off from its usual European sources of supply in some varieties of paper, although on account of the economic depression the total imports in almost all lines of products have been considerably diminished.

Ordinary writing papers have come from Italy and Germany in large amounts, these including correspondence papers of light weight and ruled business papers, for bookkeeping and accounts. Typewriter paper has come from the United States in fair volume, although some has come from Germany and England, the carbon paper coming largely from Germany.

The Venezuelan Government has a monopoly of the sale of cigarette paper, which it has imported from Spain. The paper to be used for stamped official business is also imported by the Government from Spain.

Paper for printing and lithographing has come largely from the United States. With the exception of official reports but few books are published in Venezuela and but few of the periodicals use other than unglazed news print.

News print has been shipped almost exclusively from New York. Most of that received at La Guaira has been of American production, but some Canadian has also entered, possibly a fourth of the total supply. As the customs returns mention only the country of shipment, detailed statistics regarding country of origin or manufactures cannot be given. The importations of print paper from all countries is given in an accompanying table.

As paper pays a specific duty estimated on the gross weight of the importation the wrapping paper imported, as well as other classes of paper, is of as light weight as will serve the purpose. Unnecessary weight is a very undesirable condition. There are two styles of packing in vogue, namely, packages of five reams of 400 sheets each ("resmas completas") preferred at La Guaira and along the coast, and packages of five reams of 360 sheets each ("resmas falles") preferred for the trade in Caracas and the interior. A reduction in price is paid for the smaller packages.

The importation of wall paper is not extensive—in 1914 but $4,454 for the entire country. The United States supplies about a third of the consumption.

The blotting paper used is a little thinner and more flexible than that ordinarily used in the United States.

There is one paper mill in operation in Venezuela. It is located near Caracas and manufactures a brown wrapping paper. It supplies but a small proportion of the wrapping paper consumed in the country, but no data concerning output or operation is published. There has recently been begun the importation of wood pulp in sheet form from Sweden via New York for the use of this mill. There is projected another mill to be located at Maracay, but it is not yet in operation. It was the intention to utilize a variety of grass growing in that neighborhood. No paper is exported.

PRESENT BUSINESS OPPORTUNITY.

The European war has had the effect of shutting off imports. The attention of paper importers has turned to the United States for their source of supply. They have not in all cases been able to find there just what was desired to replace the European article, and it is to be hoped that American manufacturers will devote some attention to making what this market needs, as in good years the paper importations of this country have reached the value of about $185,000.

The fact that Venezuela is nearer to New York than to Europe, and that there is a good steamship service to the United States, are points in favor of American trade. With the large shipments of coffee and cocoa as well as hides now being sold in the United States, because cut off from their usual European markets, the exporters have now larger cash balances than usual in the United States, and this will help to finance their purchases of articles there.

As a large proportion of the purchasing is done through export commission houses in New York, these as well as the importers here should be carefully supplied with samples and prices. The broker or agent has a far less influence and importance here than in other countries, and importations are usually made directly by the dealers. Samples and net prices should therefore be shown by travelers or sent direct to the importers.

If trade is sought direct with the importers in this country, it may be stated that terms of three months will be gratefully appreciated by houses which have been accustomed to that time from their former European connections. Credit should of course be conceded only after the seller has received satisfactory assurances regarding the standing of the purchaser. Bills of lading do not hold goods in Venezuela, and the consignee mentioned in the consular invoices is considered the owner by Venezuelan law and can always obtain the goods from the customhouse regardless of any unpaid drafts against him. An accepted draft, however, is a different thing, and is a document of high class legally in the courts of Venezuela.

The importations shown in the following table are for the entire country and are for calendar years:

Articles and countries.	1909	1910	1911	1912	1913
Print paper:					
United States	$30,260	$17,202	$9,158	$41,380	$45,206
United Kingdom	38	1,113	65	110	....
Germany	6,105	1,612	1,015	696	575
France	58	22	....	3	....
Netherlands	474	174	6	157	104
Belgium	....	295	79	333	164
Spain	....	....	....	522	....
Total	36,935	20,418	10,323	43,201	46,049
Wall paper:					
United States	1,838	1,475	2,948	4,698	1,615
United Kingdom	128	553	266	200	41
Germany	2,960	2,836	3,076	3,694	2,371
France	273	429	459	317	62
Netherlands	....	....	378	326	365
Belgium	....	....	211	26	....
Total	5,199	5,293	7,338	9,261	4,454
Paper, not otherwise specified:					
United States	10,370	14,365	17,412	25,766	19,945
United Kingdom	1,750	4,612	6,530	6,862	4,412
Germany	48,194	43,689	61,385	49,551	44,755
France	1,212	1,705	1,764	1,751	2,080
Netherlands	12,767	23,896	15,659	25,276	25,833
Belgium	867	1,567	2,167	2,347	2,837
Spain	4,105	4,291	3,810	5,727	4,728
Italy	11,905	8,678	23,261	14,600	14,444
Total	91,170	102,803	131,988	131,880	119,034

The countries named are those from which the merchandise was shipped to Venezuela, and are not necessarily the countries of origin. Colonies included with mother countries.

ASIA.

ARABIA.

From Vice Consul Mahomed Fazel, Maskat, Oman.

Most of the papers used here are imported from Bombay, India, I do not see any possibility in the near future for American papers, as it is convenient to merchants in these parts to get their supplies from Bombay. Such papers are manufactured in Germany, Italy, and India chiefly. About $1,500 worth of papers are imported here annually.

CHINA.

AMOY.

From Consul Lester Maynard.

In a district of few industries, such as the Amoy consular district, the manufacture of paper stands out very prominently. In addition to the great quantity used locally, paper is the most important article in the export trade of this port, amounting to 27 per cent of all exports during 1913. The exports in 1912 were valued at $478,564 and increased in 1913 to $512,553, a gain of $33,989. As paper of local manufacture is coarse, its uses are limited. Also as the manufacturing facilities are restricted, it is necessary to import large quantities from other Chinese ports and from abroad. The imports of paper (including cardboard) amounted to $21,538 in 1912 as compared with $79,119 in 1913, a gain of $57,581.

The above figures, taken from the customs statistics, are for foreign paper from foreign countries, but as foreign paper also enters Amoy through Chinese ports, the total amount is greater. Over 70 per cent of the foreign paper imported into Amoy comes from Hongkong, and as the greater part of this is paper which entered Hongkong from Canton it is in reality Chinese paper, although entered in the customhouse as coming from a foreign port and recorded as foreign paper. From this it is evident that the quantity of paper of actual foreign manufacture entering Amoy is relatively small, and the prospect of introducing American paper is not very attractive, as the kind of paper in demand here is not manufactured in the United States. This is further borne out by the fact that there are practically no direct sales of foreign paper to Amoy, almost all of the foreign paper used here being purchased in Hongkong and a small quantity in Shanghai. It would therefore be advisable for paper manufacturers or exporters in the United States to effect selling arrangements or establish agencies in Hongkong, with South China as their field of operations, which would include Amoy.

REQUIREMENTS AND PRODUCTION.

The import statistics give an inadequate idea of the amount of paper used in the South Fukien Province, as the manufacture of paper from bamboo is the most important native industry of the district, the bulk of which is used locally as "joss paper."

Paper is not manufactured in large factories using machinery, as in the United States, but is confined to small private factories in the valleys and gorges of the mountainous parts of the hinterland, far from the trade centers. The most important region in this district for the manufacture of paper is Tingchow. The method of manufacture is extremely crude, as will be noted from the following description.

Manufacturers of paper always own their own land, on which they grow bamboo as well as a species of mulberry tree (*Broussonetia papyrifera*), the bark of which is used in the manufacture of paper in connection with the slender root of a tree which grows in this region, principally north of Foochow in the prefecture of Yeng Ping. The roots vary in length from 1 to 3 feet and are very tough, with a brown skin. The manufacture of paper starts about the month of March, when the bamboo shoots are about 6 inches in length and before the leaves appear. The shoots are cut and split into four sections and are then placed between layers of lime in a pit built of limestone and sand. When this pit has been filled to about 80 per cent of its capacity, a hole at one side is opened to allow the water of a mountain stream to enter until the pit is full, thus forming a pond. The water is then shut off and the bamboo shoots are allowed to soak for about two weeks, when the water is once more let into the pond, and by openings at the lower end the surplus water is drained off. This draining process continues until June, when the lime has been entirely washed away and the bamboo shoots are soft. The latter are then removed and beaten to a pulp at small water mills driven by the mountain streams. The pulp is then squeezed by hand and spread on the branches of bracken (coarse fern) and allowed to remain exposed to all conditions of weather until August, when it is found to be thoroughly dry and bleached a pure white. After this the pulp is removed from the bracken and again pounded with the bark of *Broussonetia papyrifera*, and the previously described roots and a little water. It is crushed very fine. It is then placed in clean water to dissolve evenly.

The pulp is now ready to be manufactured into paper, and for the latter process a frame is used averaging 22 to 34 inches in length and 14 to 18 inches in width. Into this frame is fitted a mat consisting of thin and highly polished bamboo strips running crosswise and bound together with silk cord. The broad end of the frame is dipped into the dissolved pulp, and by tipping the frame the pulp flows evenly over the surface. The frame is then turned upside down, the mat falls out, and an assistant strips the sheet of paper, thus formed, from the mat. These sheets are laid one on top of the other until sufficient sheets have been made, when they are pressed and most of the water removed. The sheets are then separated and placed on the walls of a specially constructed narrow furnace, usually 7 to 10 feet in length and 5½ to 8 feet in height, with both long walls exposed. After one wall has been covered with paper the assistant then proceeds to cover the opposite wall, and by the time that is finished the paper on the first wall is sufficiently dry to be removed. The paper is then cut into the required sizes and packed for shipment to market.

These small paper mills are scattered throughout the mountainous region where labor is extremely cheap. As far as possible young boys are employed. Most of this paper is consumed locally, but, as previously stated, the exports amount to $500,000.

Following is a list of 12 kinds of paper of local manufacture which enter largely into the export trade of this port, with prices in United States currency per picul (113⅓ pounds):

No.	Kinds of paper.	Quality.	Value per picul.	Purpose for which used.
1	Joss paper	First	$6.67	Prayer to the gods.
2	do	do	$11.12–13.35	Prayer to the ancestors.
3	do	Second	3.71– 4.45	Prayer to the ancestors and the spirits.
4	do	do	2.95	Burned with No. 1.
5	do	do	2.97	Burned with No. 3.
6	Writing paper	First	11.86	
7	Letter paper	do	22.25	Lined.
8	Account books	do	18.54–22.25	Varying sizes of books and heavier paper.
9	Colored papers	do	8.90–11.12	Used for ceremonial and decorative purposes.
10	Packing paper	Second	2.20– 2.60	Composed of several sheets pasted together; when separated to single sheets, used as toilet paper.
11	do	do	3.71– 4.45	
12	Playing cards	First	18.54	Ordinary bamboo paper, with stiffening of clay composition rubbed with smooth stones.

ANTUNG.

From Consul Edwin L. Neville.

The paper generally in use here is thin and of Chinese or Japanese make. There is very little European or American paper to be had in this vicinity. The Chinese and Japanese, owing to their preference for the use of a brush instead of a pen for writing purposes, are able to make use of a style of paper which would be of no value in Western countries.

The only concerns here using bond and ledger paper to any extent are the Chinese customs and the banks. These institutions, I understand, receive their supplies of stationery from their head offices.

There are no publishing houses here, and consequently no demand for book papers. The only newspaper in operation (a Japanese paper) is printed on ordinary pulp paper imported, it is stated, from Japan. Practically all paper supplies are imported.

Paper is sold here in lots of 80 sheets. Prices for different styles range about as follows: Wall and window paper, $0.20 wholesale, $0.22 retail; writing paper, $0.07 wholesale, $0.08 retail; book paper, $0.07 wholesale, $0.08 retail; news paper, $0.32 wholesale, $0.36 retail.

The total imports of paper at Antung during the year 1913 amounted to $69,702, of which $67,682 came from Japan and Chosen. It hardly seems probable that American paper manufacturers would find Antung a profitable field.

CANTON.

From Vice Consul General J. K. Davis.

This consular district embraces approximately 406,000 square miles, and as statistics other than the Chinese Maritime Customs returns do not exist, the information in this report covers the Province of Kwangtung only and should be regarded as approximate rather than exact.

The paper trade of China has been centered in the south for several centuries, and the wholesale dealers of the cities of Canton and Fatshan have, until a few years ago, practically supplied all of China. Just at the end of the nineteenth century a combination of circumstances gave rise to the import of foreign paper. A severe drought caused a large and sudden increase in the cost of rice straw and bamboo pulp, the materials commonly used to make the native paper, and at the same time a serious decline in prices occurred in the paper market of Europe. The importation of foreign paper, begun thus by chance, has grown into a trade of great importance, as the imported product appeals to the consumers on account of its superior quality and purer color.

In the year 1903, owing to the accumulation of a large unsalable stock by the Canton and Fatshan dealers, there occurred a serious depression in the foreign-paper trade. However, the following year the trade revived and steadily increased until, in the year 1911, a high-water mark was reached, with a total importation of foreign paper into Canton to the value of $598,115 United States currency. The importations into Canton for the past five years have been as follows in United States currency: 1909, $500,330; 1910, $448,915; 1911, $598,115; 1912, $309,611; 1913, $596,255.

According to the estimate of a Chinese paper expert, approximately two-thirds of the paper supplied to the Province of Kwangtung is imported, through Canton as a port of entry, from the following foreign countries: Sweden, Norway, Germany, Great Britain, France, and Japan. With the exception of a small quantity of stationery, such as writing paper, foolscap paper, envelopes, etc., suitable for foreign correspondence, American paper is practically unknown to the Chinese in this Province, owing to its high price, the high freight rates on paper from the United States to Canton, and the absence of special agencies at Canton for the marketing of the American article.

The principal obstacle in the way of the exporter of American paper to this district is the matter of freight rates, for from both Atlantic and Pacific ports the rates are much higher than those obtaining from the ports of European competitors. I am informed that paper from Germany and from some of the other European countries comes to China as ship ballast and as a consequence pays a very low rate indeed. It would therefore seem that unless the American exporters can make arrangements for more advantageous rates they can not hope to compete, as the prices for American paper laid down in Canton are, under the present circumstances, necessarily higher than those of the European product.

IMPORTED PAPER.

There are several kinds of imported paper which find a ready sale in this district:

Dyeing paper or A1 printing paper.—The foreign paper most generally used in this Province is a well-sized printing paper which the Chinese dye on one side in scarlet, Turkey red, orange, and pink colors. It is used chiefly for mottoes supposed to bring good luck, which are posted up in the houses for the New Year s celebration and on other auspicious occasions. Although the dyes used by the Chinese in preparing this paper come from Germany and other foreign countries, all attempts to dye it abroad have so far proved unsuccessful, as the paper dyed abroad does not have the brilliancy of color demanded by the market. The preparing of this paper forms a considerable trade, and the finished product is largely sent to other ports of the Republic and to Chinese residents abroad. The value of the annual consumption in this Province of this class of paper is estimated at from $375,000 to $500,000 United States currency. This paper is desired in two sizes. The larger size is 48½ by 29 inches, and the most popular grade runs 40 pounds to every 500 sheets; the smaller size is 51 by 22 inches and runs 22 pounds. The former sells for $0.06¾ Mexican ($0.032 U. S. currency) and the latter for $0.07¾ Mexican ($0.036) per pound, c. i. f. Canton.

Printing paper.—There are several grades of imported printing paper which are largely used. The two most popular grades are 51 by 22 and 53 by 26 inches in size and run 21 and 17 pounds, respectively, per 500 sheets. This paper sells for $0.07½ and $0.09 Mexican ($0.035 and $0.04 U. S. currency) per pound, c. i. f. Canton. The 26 by 53 inch grade is glazed on one side and is largely used in books, as in Chinese books the leaves are doubled, thus leaving only the glazed surface exposed to view.

Another grade of popular unglazed imported printing paper comes in sheets 25 by 50 inches in size and runs 34 pounds per 500 sheets. It is also commonly used as a wrapping paper. This paper sells at $0.06¾ Mexican ($0.032) per pound, c. i. f. Canton. A fourth grade of printing paper, which is glazed on one side and suited for lithographic work, comes in sheets 27 by 46 inches, runs 50 pounds per 500 sheets, and sells for $0.10 Mexican ($0.0467) per pound, c. i. f. Canton.

Paper for newspapers.—Two kinds of unglazed white imported paper are very generally used for newspapers. The most popular grade comes in sheets of 42 by 31 inches, runs 38 pounds per 500 sheets, and sells at $0.06½ Mexican ($0.03) per pound, c. i. f. Canton. The grade which is next in popularity comes in sheets of 42 by 29 inches, runs 36 pounds per 500 sheets, and sells at $0.06¾ Mexican ($0.032) per pound, c. i. f. Canton.

Tissue paper.—There is a limited demand for imported white tissue paper, which is used by the Chinese for making drawings and tracings. This is usually in sheets 30 by 20 inches, runs 9 pounds per 500 sheets, and sells for $1.58 Mexican ($0.74) per ream of 500 sheets, c. i. f. Canton.

Glazed paper for lithographic work.—There is a limited demand in this Province for glazed and colored paper for lithographic work. This paper is commonly used to cover cardboard boxes and comes in more than 20 colors. The sheets are 30 by 20 inches, and the paper runs 28 pounds per 500 sheets and sells for $0.14 Mexican ($0.065) per pound, c. i. f. Canton.

Brown paper for book covers and wrapping.—There is a fair demand for brown wrapping paper glazed on one side. This is used for book covers as well as wrapping. The most popular grade comes in sheets 51½ by 22 inches, runs 45 pounds per 500 sheets, and sells at $0.07½ Mexican ($0.035) per pound, c. i. f. Canton.

"Affichen" paper.—A paper known to the Germans as "affichen" paper is used to a considerable extent for printing handbills, circulars, etc. This paper is glazed on one side and is desired in orange, pink,

brown, green, and yellow colors. It comes in sheets 51½ by 22 inches, runs 23 pounds per 500 sheets, and sells for $0.08¾ Mexican ($0.041) per pound, c. i. f. Canton.

Cardboard.—The demand for cardboard is small. The grade most commonly sold comes in sheets 30 by 25 inches, runs 9 ounces to the sheet, and sells for $1.80 Mexican ($0.84) per 76 sheets, c. i. f. Canton.

Domestic papers.—The supply of native paper at Canton comes chiefly from Fukien Province, although a small quantity comes from Shiukwan and Namhung, in this Province. Almost all of this paper is made by hand, and the annual consumption is estimated at about $500,000 United States currency, although this figure can not be verified. The wholesale paper dealers are located only in Fatshan and the city of Canton, the wholesale business in paper imported from Fukien Province being handled exclusively by Fatshan firms. The raw materials and labor used are so cheap that, with the exception of paper similar to the kinds already described, it is not at all probable that imported paper could compete.

Dyeing paper.—This paper is used similarly to the imported dyeing paper, but is of a yellow color and inferior quality. It comes in sheets of irregular weight, size 52 by 22 inches, and sells for $0.50 Mexican ($0.23) per 200 sheets.

Printing papers.—The best grade of native-made printing paper is a white unglazed paper known as "Poon Cho." It comes in sheets of 50 by 25 inches, runs 3½ pounds per 96 sheets, and sells at $0.60 Mexican ($0.28) at Canton.

Account-book paper.—A yellow unglazed paper manufactured in Fukien Province is commonly used for the making of account books and similar blank books. It comes in sheets of 54 by 24½ inches, is of irregular weight, and sells for $1.80 Mexican ($0.84) per 200 sheets in Canton.

"*Luk Do*" *paper.*—This is also a Fukien paper. It is cream colored and unglazed and is generally used for making native envelopes, pawn tickets, promissory notes, title deeds, etc. It comes in sheets 54 by 28½ inches in size, which are of irregular weight, and sells for $1.40 Mexican ($0.65) per 96 sheets.

"*Sandpaper.*"—A rough, unglazed, light brown paper, commonly known as "sandpaper," which is made in Kwangsi Province, is generally used for title deeds and similar documents, and also as a wrapping paper. It comes in sheets 23 by 21 inches of irregular weight, and sells in Canton for $0.15 Mexican ($0.07) per 38 sheets.

Packing paper.—A rough, unglazed, white packing paper, made in Canton, is, owing to its toughness and absorbent qualities, used to a considerable extent in Canton. It is used in the making of legal petitions and also for packing. This paper comes in sheets 51 by 26 inches, runs 6½ pounds per 96 sheets, and sells locally for $0.86 Mexican ($0.40) per 96 sheets.

Chinese writing paper.—The writing paper most generally used in this Province comes from Fukien and is cream colored and unglazed. It comes in two general sizes, 20½ by 19 inches and 23 by 20 inches, and sells in Canton for $0.20 and $0.35 Mexican ($0.09, $0.16) per 126 sheets, respectively.

Wrapping papers.—The most commonly used native wrapping papers are made near Canton, at a place called Namhung. This paper is cream colored and unglazed. It comes in sheets varying in size from 23 by 20½ to 22 by 19½ inches, and sells for from $0.10 to $0.06 Mexican ($0.046, $0.03) per 60 sheets

Toilet paper.—The grade of toilet paper most in use in this Province is made locally, is brown in color, and very coarse. It comes in sheets 15 by 18½ inches of irregular weight and sells for $8 Mexican ($3.74) per picul of 133⅓ pounds.

Joss paper.—This is a paper very extensively used by the Chinese in their religious observances. It is manufactured from straw and clay in the immediate vicinity of Canton. It is of a dark brown color and is very rough, is commonly sold in sheets 7½ by 10 inches, runs 4 pounds per 800 sheets, and sells for $0.30 Mexican ($0.14) per 800 sheets.

HOME PRODUCTION.

The materials most commonly used in the manufacture of paper in this Province are bamboo pulp, rags, rice straw, and sugar-cane waste. Bamboo pulp sells for approximately $0.28 gold, rags for $1.18, rice straw for $0.19, and sugar-cane waste for $0.33 per picul of 133⅓ pounds

There are two modern paper mills in this Province. The oldest is a Government mill located at Three Eye Bridge, on the Samshui branch of the Yueh-Han Railway. The equipment for this mill was originally purchased from a Scotch firm, but has been subsequently supplanted by German and Japanese machinery. I am informed its output is about 7,000 pounds per day of 11 hours. The labor in this mill is paid from $16 to $4 United States currency a month and is said to be fairly efficient. The paper manufactured is not of a good quality and is used chiefly for the printing of official proclamations and for the packing of bristles. The other mill is located at Kongmoon, about 50 miles southwest of Canton. The manager of the mill is a returned Japanese student, and all of the equipment comes from Japan and is, I am informed, of such inferior construction that the production guaranteed by the sellers has never been reached. The guaranteed production of the plant was 100 piculs of 133⅓ pounds per day of 10 hours, but up to the present the maximum production has been only 17 piculs. The raw materials used are rice straw and rags. As owing to the inferior installation the paper produced is not of uniform thickness or strength, the products of this mill have not met with any large demand. The cost and efficiency of labor are practically the same as in the mill of Three Eye Bridge.

PAPER EXPORTS.

The following is an extract from the Chinese customs returns showing the exports of paper from Canton for the year 1913, values in United States currency. The destination of the paper is not shown.

Paper.	Quantity.	Value.
First quality............pounds..	621,466	$68,308
Second quality............do....	344,400	17,668
Joss paper............do....	354,800	53,213

IMPORT TRADE.

The following table, taken from the Chinese customs returns, shows the imports of paper into Canton by classes for the year 1913:

Paper.	Quantity.	Value.
Cigarette ... mille..	18,780	$2,786
Packing ... pounds..	2,848	12,928
Printing, calendered and sized ... do....	5,017	31,279
Printing, uncalendered and unsized ... do....	99,367	361,981
Tissue ... do....	17,174	83,139
Wall ...	....	1,211
Writing ... pounds..	343	7,754
Other kinds ...	....	96,177
Total ...	....	596,255

The greater part of the import business is handled in Canton by German firms, but I am informed that the country from which the largest amount of paper is imported is Sweden. At the beginning of the trade in this Province the Austrian product was the most popular; later the German article took the lead, but only to lose it after a few years to the paper from Sweden, which has now been the favorite for several years. I am informed that it is owing to cheap and abundant raw material, adequate water power near to shipping points, and to the low freight rates from Sweden to Canton that it is possible to put the Swedish paper on the local market at the low price which has caused its present popularity.

POSSIBILITIES FOR AMERICAN PAPER.

There are no discriminating duties which would operate against American paper, and if American paper manufacturers can secure lower freight rates, will make the paper the market demands, and secure proper representation in Canton, there is no reason why they should not enjoy a large share of the growing market. As in almost every other line in this market, competition is very keen, and consequently terms to sellers vary greatly, and the Chinese buyer can secure practically such terms of payment as he desires. There seem to be no fixed selling terms.

Practically all the firms who are in a position to handle American paper are already agents for European paper, and while this would not prevent their taking the agency for the American product, it would probably be found, as is now true in the case of the various lines of American machinery represented by foreign firms at Canton, that these firms would only sell American goods when they found it impossible to sell goods coming from the country of which they are citizens.

DAIREN.

From Consul Charles L. L. Williams.

With the exception of a foreign population of less than 100 people the inhabitants of this consular district, embracing the Kwangtung Leased Territory (Japanese), are Chinese and Japanese, and consequently the popular demand for foreign-made paper is not great.

There is a limited market for printing paper of assorted kinds, and the local Japanese dealers state that there are several hundred varieties of this class of paper valued at $100,000 United States currency used annually at this port. About 80 per cent of this printing paper is of Austrian manufacture and the remaining 20 per cent American, British, and Japanese. The standard size is 31 by 43 inches, and in addition there is a special so-called Japanese size, 25 by 33 inches. The quality is medium and the finishes vary from dull to glossy. The gross weights are 50, 60, 70, 80, 90, 100, 110, 120, 130, 150, 200, 250, 350, and 400 pounds per ream (70 per cent of the gross weight is calculated as being the actual net weight of the paper). The average weights range from 70 to 150 pounds per ream. Newspaper establishments and the South Manchuria Railway Co. consume the greater part of this kind of paper.

The value of imports of paper into Dairen by railway during 1911, 1912, and 1913 in United States currency was as follows:

Classification.	1911	1912	1913
From foreign countries	$250,355	$340,561	$324,758
From Chinese and other sources	29,676	20,202	23,072
Total imports	280,031	360,763	347,830
Reexports	667	2,197	1,818
Total net imports	279,364	358,566	346,012
By railway into interior	141,243	224,575	294,360
Remaining in leased territory	138,121	133,991	51,652

Following is a statement of the quantity and value in United States currency of paper imported into the Kwangtung Leased Territory during 1911, 1912, and 1913, by countries:

Country.	1911		1912		1913	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Belgium:	*Pounds.*		*Pounds.*		*Pounds.*	
First quality	21,067	$858	....	....	37,467	$1,691
Second quality	....	1,094	....	....	....	3,426
Germany:						
First quality	459,200	19,296	1,478,667	$81,526	785,467	25,029
Second quality	....	12,895	....	23,503	....	22,822
Great Britain:						
First quality	7,600	713	15,733	563	13,867	606
Second quality	....	2,142	....	871	....	3,606
Japan (including Formosa):						
First quality	1,673,867	51,452	2,309,467	80,590	2,665,066	88,280
Second quality	....	160,199	....	151,708	....	177,971
Other countries:						
First quality	666	21	400	16	....	....
Second quality	....	1,685	....	1,784	....	1,327
Gross import from foreign countries	2,162,400	250,355	3,804,267	340,561	3,501,867	324,758
Reexports	....	667	3,333	2,197	10,267	1,818
Net import from foreign countries	2,162,400	249,688	3,800,934	338,364	3,491,600	322,940

As Dairen is a free port, there are no customs duties to be paid. The shipping facilities are excellent, as steamers of almost every line operating in the Far East touch here. The usual terms of payment are 60 days' sight draft, and local merchants ordering in wholesale lots are allowed a discount of 10 per cent from the retail prices quoted by dealers in Japan.

FOOCHOW.

From Consul John Fowler.

Paper is one of the principal products exported from this port. Its chief market is the coast north of here—Tientsin, Chefoo, Newchwang, Kiaochow, etc., where it is used for printing, writing, wall papers, religious offerings, etc.

The demand for this paper seems to be declining from year to year in its principal market, the above-mentioned northern ports, though the customs returns give the exports to foreign countries as increasing. There is no doubt that foreign or American paper ought to find a market in this country. It will require time, as the Chinese will have to become accustomed to its uses and prepared to pay the higher prices.

There are many kinds of paper manufactured in this consular district. The following are the principal manufacturing centers, with the kind manufactured in each place, for what purposes, etc.:

Lien-chen district: Lien-hsi, chiefly used for books; chuan-chih, high-grade dispatch and document paper; pei-liao, for scrolls; ta-kung, for note and account books; chung-kung, shiao-kung, and yang-chuang, note paper and for account books most in demand.

Chiang-le district: Chu-lien, colored paper; kuang-tou, wall paper; ta-kung, for printing; sung-kou and kuei-shan, for wall papering; ta-kon, shiao-kon, and chung-kon, mostly supplied to Tientsin for religious offerings.

Cung-an district: Mo-tai, ta-mo-tai, chung-tai, and shun-tai, mostly shipped to Chefoo, Newchuan, and Kiaochow for making dispatch paper and wall paper; chang-tai, shipped to Soochow for lining silk cocoon baskets; mo-liu, mo-pai, chang-chuan, and shiao-chuan, mostly shipped to Tienstin; king-tai, exported to Peking for wall paper; hang-tai, exported to Hangchow.

Yu-chi district: Shiao-hai, exported to Chefoo, Newchuan, Kiaochow, for joss paper; cha-chih, used for wrapping paper.

Bamboo is the only raw material for paper manufacture in this Province. The cost of labor in these mills is very low, ranging from $2.50 to $3 gold per month. The equipment for the mills is made locally and, as has already been stated, very crude. There are several mills in this district, but the exact number is unknown, some of them being very insignificant.

Statistics for exports and imports are general. The customs returns do not give the countries with which the trade is carried on, only the amount and value. Following are statistics of exports as compiled by the customs for 1910, 1911, 1912: 1910, 12,708,800 pounds, valuo $650,196; 1911, 12,639,600 pounds, value $125,616; 1912, 16,136,666 pounds, value $1,088,876. Imports of paper for the same years were as follows: 1910, 256,000 pounds, value $15,558; 1911, 295,200 pounds, value $18,846; 1912, 328,666 pounds, value $21,696.

HANKOW.

From Consul General Roger S. Greene.

The paper used in this district consists for the most part of native Chinese papers. The imported paper is mainly the cheaper grades of paper used for book and newspaper printing. American products are almost excluded because of their high cost. In spite of the cost, however, a small quantity of American bond and linen papers are imported because of their superior quality. No doubt American paper would find a readier sale in this district if there were an American importing house to push the business. Yet it must be borne in mind that, aside from paper for newspapers, etc., comparatively little use is made of foreign paper by the Chinese themselves, except by the comparatively few who have business or social relations with foreigners.

As the native paper is manufactured by hand in the same primitive method used centuries ago, and as there are no large dealers who handle a known percentage of the amount produced, there are no means of ascertaining the amount used. Neither is it likely that paper of foreign manufacture will soon be able to replace the native product, which is peculiarly adapted to the Chinese ink and style of writing, and is, besides, in many cases stronger than the imported papers. Much of the trade in Chinese paper is carried on in junks and by railway and consequently does not appear in the statistics; but part, being in vessels of foreign type, comes under the supervision of the maritime customs. The following table, therefore, showing imports and exports of Chinese paper at Hankow in 1912, gives a partial idea of the extent of the business. Values are United States currency.

Chinese paper.	Imports from Chinese ports.		Exports, including reexports.	
	Quantity.	Value.	Quantity.	Value.
	Pounds.		*Pounds.*	
First quality	601,733	$107,209	127,733	$22,763
Second quality	477,867	17,495	5,032,267	185,004
Joss paper	1,110,400	141,974	....	....
Shanghai mill	506,267	25,163	18,267	900
Other kinds	201,200	2,815	....	....
Total	2,897,457	294,656	5,178,267	208,667

Of the foreign papers used, printing and cap papers predominate, but even in these sizes, weights, and qualities vary greatly. In general, the cheapest light weight, opaque papers are preferred.

It can hardly be said that there are any standard sizes of paper required for the local market. The quality, weight, finish, size, etc., depend mainly on the personal preference of the user. Much of the variety is caused by the influence of the several nationalities represented in Hankow. This especially is true of writing paper and stationery, in which English manufactures seem to predominate. No book papers such as Bible or India papers are used.

The newspaper that finds the readiest sale is the cheapest lightweight paper on which the printing will not show through on the other side, although even this latter qualification is not always necessary, especially if the paper is to be sent by mail. About equal amounts of calendered and sized printing paper and of uncalendered and unsized paper are used. The common sizes and weights per ream of 500 sheets are 24 by 36 inches, 30 to 34 pounds; 27 by 40 inches, 43 pounds; and 31 by 43 inches, 37 pounds. M. G. cap calendered on one side, 25 by 44 inches, is of a very light weight, being only 17 pounds per ream of 500 sheets.

The cheap, coarse, native wrapping and wall papers are largely used where such papers are required. Very little wall paper is used in foreign houses here, and foreign wrapping paper is little used, except in the few foreign shops.

Practically no cover, cloth-lined, parchment, or wax papers are used, and the small amount of blotting, tissue, and carbon papers used is of all varieties to suit the preferences of the various users. A fairly large amount of cigarette paper is used by the local factory of the British Cigarette Co. Strawboard, box board, pressboard, and Bristol board are not used by the Chinese, and to a very small extent by the comparatively few foreigners (about 1,500) in Hankow. Exceptions should be made as to the boxes and mouthpieces for cigarettes used by the British Cigarette Co.

RAW MATERIALS.

For the manufacture of paper in this district bamboo, straw, and rags are available. Rags cost the manufacturer $15 gold per ton of 2,240 pounds. A good quality of wood pulp has been imported at a cost of $69 gold per ton, although cheaper grades costing $40 and $33.25 have been used. There is no lumber available in this neighborhood for the manufacture of pulp, the greater part of the country being bare of forest growth.

Near Hankow there are two paper mills for the manufacture of foreign-style papers, but only one of them, the Wuchang paper mill, is in operation at present. This is a small mill which was built by the Province of Hupei a few years ago. For some time it was operated by the Government at a loss, mainly because too many useless men were employed. Then it was turned over to a private management. At the outbreak of the revolution of 1911–12 all work ceased and was not resumed till March, 1914. Negotiations have been under way for some time for the reestablishment of governmental management.

Under normal conditions the output of the mill was 60 bundles of 76 pounds each per day, making a total daily output of 4,560 pounds, but with the present low water only 35 bundles are made per day. The paper made is not good enough for news paper and is therefore used for wrapping paper. The two chief reasons for this are that the beaters are in such poor condition that the knives do not come into close contact with each other, and that the machinery is all driven by one engine. These two things necessarily cause unevenness in the paper in spite of the fact that the paper machine itself is a good one. The machinery in the mill is of Belgian manufacture. Formerly about 300 men were employed in the mill, whereas only 100 have been employed since the mill was reopened. However, even this is a considerably larger number than would be employed in a mill of the same size in the United States.

Seven miles below Hankow and a half mile from the mouth of Seven Mile Creek is the Government paper mill. This mill was erected in order to furnish the Government with all kinds of official paper such as will be used for bank notes, postage stamps, post cards, correspondence, etc. The architects were American. The mill consists of several large well-constructed buildings of brick, concrete, steel, and wood. The mill was not quite completed at the outbreak of the revolution of 1911–12, when all work on it was stopped. During the revolution the buildings were occupied by soldiers and many of the brass and copper fittings were stolen.

The mill is fully equipped with the very best machinery, all of which, except that in the pumping station, was supplied by American manufacturers. The machinery in the pumping station is all of British manufacture, as is part of the electrical machinery.

The bank-note paper machine in this mill has a capacity of 1,200 pounds per day, but it will ordinarily be run only during the daytime and will, therefore, make 600 pounds of paper per day. The large paper machine, on which all the other kinds of paper will be made, will be run both day and night. This machine will make 24,000 pounds of paper a day.

PRICES OF IMPORTED PAPER.

Imported news paper is landed in Hankow at the following prices in gold per ream of 500 sheets: 24 by 36 inches, $0.95; 27 by 40 inches, $1.96; 31 by 43 inches, $1.13. M. G. cap 25 by 44 inches is imported at the cost of 63 cents per ream.

The paper made in the Wuchang mill is sold for $3.18 United States currency per bundle of 1,500 sheets weighing 76 pounds and measuring 26 by 45 inches.

A negligible amount of paper (native) is exported. Last year only 800 pounds, valued at $166 gold, was shipped from this port to foreign countries.

The following tables show the imports of foreign paper in 1912, and 1913:

Kinds of paper.	1912				1913			
	From foreign countries and Hongkong.		From Chinese ports.		From foreign countries and Hongkong.		From Chinese ports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Absorbing..........pounds..	96,933	$3,150	126,800	$4,205	15,733	$570	76,933	$2,588
Bank note...........reams..	292	2,529	273	2,290	1,877	15,865	614	5,635
Boxes, mouthpieces, etc., for cigarettes..........	....	14,154	....	5,756	....	4,709	....	4,751
Cigarette paper........rolls..	54,580	13,148	105,800	28,742	35,689	16,997	12,438	8,025
Medium grade cap..pounds..	....	....	....	....	552,133	17,958	....	....
Packing...............do....	705,333	25,036	740,400	24,568	87,867	2,530	903,867	28,497
Printing, calendered and sized............pounds..	223,200	8,143	273,067	10,305	660,667	25,883	517,733	20,296
Printing, calendered and sized, Japanese....pounds..	10,933	569	3,600	147	25,200	1,101	13,333	603
Printing, uncalendered and unsized..........pounds..	505,067	13,204	552,300	14,400	649,733	19,151	919,867	25,885
Printing, uncalendered and unsized, Japanese.pounds..	923,867	26,632	220,670	6,361	1,034,267	30,370	36,933	1,085
Tissue.................do....	9,067	401	27,733	1,012	44,800	1,674	90,933	3,028
Wall..........................	....	20	....	1,200	....	314	....	2,755
Writing............pounds..	11,200	883	12,800	1,008	12,267	951	13,467	1,112
Other kinds..................	....	7,877	....	4,262	....	6,312	....	8,260
Stationery....................	....	35,070	....	11,891	....	50,655	....	20,425
Wood and straw pulp, pounds..................	320,000	6,447	....	....	54,667	1,123	112,000	1,091
Coarse paper.......pounds..	....	....	....	....	....	....	679,667	17,152
Total.................	....	157,263	....	116,147	....	196,163	....	151,188

The conversions in the above tables are made on the basis of 133⅓ pounds to the picul and of the Haikwan tael, being equal to $0.71575 gold for the year 1912 and $0.7415 gold for the year 1913.

The imports from Chinese ports are nearly all transshipments from Shanghai. The news paper is largely Swedish and Japanese. The wood pulp is also Swedish. The M. G. cap paper is almost all Austrian. Most of the cigarette paper comes from France, while the boxes are made in England and the mouthpieces in Japan.

The importing business is in the hands of a comparatively few large firms. Exporters abroad quote to them c. i. f. and draw 120-day drafts against shipments, the documents being forwarded through a bank. Some firms have their own offices in Europe and America which attend to all matter of credit.

HONGKONG.

From Consul General George E. Anderson.

The Chinese have been credited with the invention of paper, and for hundreds of years they have used immense quantities of it in all forms and grades and for all imaginable purposes, even to the use of oiled paper for window lights. As is the case in all other products which it has used for centuries, however, the use of foreign paper by the Chinese is very limited compared with the total consumption of the product. The total amount of paper imported into China in 1912 was valued at $3,184,747, the amount including imports of cardboard. Of these imports Hongkong furnished about a fourth, Japan furnishing somewhat less, and Germany, Sweden, and in lesser degree Great Britain, furnishing most of the balance. To these imports as thus given, and the share of Hongkong in this trade as thus indicated, should be added between $500,000 and $600,000 annually for consumption in Hongkong and other points in the vicinity outside of China. The imports of paper through Hongkong come largely from Great Britain and from the same countries in substantially the same proportion as the imports into China direct, that is, about one-fourth from Japan and about one-sixth each from Germany and Sweden, various other countries furnishing smaller quantities. Belgium and Austria have been losing considerable portions of the fair share of the trade they formerly possessed. The United States has had less than 2 per cent of the direct trade with China and its proportion has been decreasing. Its share in the trade with and through Hongkong is much larger but is not large here.

The great mass of paper consumed in China—that of native manufacture—includes great quantities of rough brown straw and bamboo pulp paper made largely by hand by decomposing bamboos and other similar materials in lime vats, pressing the pulp into sheets in native hand presses, and plastering the sheets upon chimney sides or the sunny sides of houses to dry. Native manufacture also includes other and finer papers, largely colored, used by the Chinese for writing purposes and including large quantities of a light-weight paper suitable for the manufacture of Chinese account books, which are made of double leaves out of comparatively porous papers, the Chinese ink requiring treatment different from foreign inks.

MARKET REQUIREMENTS.

In Hongkong and the open ports of China there are considerable imports for the use of foreigners, both in business lines and for foreign newspapers, foreign correspondence, and foreign social intercourse. The papers imported into Hongkong at the present time in material quantities for both local use and resale to China include brown and yellow packing papers, chromo papers, white printing papers for newspapers, and a fair amount of writing and book papers. In paper for newspapers the English press uses a very fair grade of paper, usually in sheets of 35 by 45 inches and varying in price from $1.26 to $1.68 gold per ream of 500 sheets packed in bales of 10 reams. Most of it comes from or through Great Britain. The Chinese newspapers in Hongkong use a much lighter weight and cheaper paper coming in substantially the same form as that for English newspapers and cut in sheets 26 by 37 inches.

As indicated elsewhere, much of such paper used in this vicinity is made in Hongkong. There has been a vast increase in the use of this cheap paper for Chinese publications in the past three or four years, both for local use and for sale in Chinese cities. Some current sizes and weights for newspapers are: English newspapers, 35 by 45 inches, about 52 pounds to the ream of 500 sheets; Chinese, 31 by 43 inches, about 40 pounds to the ream; Chinese, 26 by 37 inches, about 29 pounds to the ream. Sizes and qualities expressed technically in English terms include: Demy, quad crown, for printing; double demy, for book work and posters; double crown, enamel, for Chinese calendars; foolscap and double foolscap, medium and large post, in general for writing and for social and commercial uses. Grades of paper used generally are only of medium quality, though for commercial and some limited social uses the high qualities are imported. There is no demand for Bible or India papers.

There is a good market for tissue paper of average grades, the principal supply now coming from England and termed, according to the trade, as Japanese tissue paper. There is another tissue paper, called locally manifolding, which is bought in large quantities by the Chinese for making cigarettes. In cover paper there is a good trade, whereas in cloth lined, parchment, and wax there is none. Carbon paper, the better qualities, are, in increasing quantities, coming from the United States. The sale for blotting paper is limited and the quality is not usually up to the American standard. Of paper boards of the various kinds, only strawboard has any ready sale in Hongkong, and this comes from Japan as, for the purposes required, other countries can not compete with the Japanese. Ivory board is used somewhat in preference to Bristol, as it comes cheaper.

The Chinese import large quantities of light, soft paper from Norway and Sweden, which they color and use for ceremonial purposes. In packing papers a great many varieties and grades are imported, including cheap, rough, brown, wood papers; one side glazed brown and yellow papers; both sides glazed brown and yellow wrapping papers; and expensive yellow and brown wrapping papers. The demand for high-grade book papers is increasing. The trade in chrome papers and lithographic papers generally is considerable, there being a strong demand for Chinese wall posters and calendars. Germany has the bulk of this trade.

The great mass of paper used in China and in the Hongkong field generally by the Chinese themselves, except for newspapers and semiforeign uses, is manufactured at various interior points in considerable quantities, in addition to the local production of rough papers common all over China as indicated above. The chief centers of manufacture are Swatow, Foochow, Kiukiang, Amoy, Kowloon, Shanghai, and Hankow. The annual exports from the first three places named will average about $500,000 gold in value for each port. The Chinese customs returns show that in 1912 Hongkong imported paper of local Chinese manufacture to the value of $924,000 gold, much of which, of course, was resold to other Chinese ports in this field. The Straits Settlements, Indo-China, Macao, Siam, and the East Indies take considerable quantities, largely handled through Hongkong. The total value of such exports from China was $2,650,974 gold, a considerable increase over previous shipments.

LOCAL MANUFACTURING.

The manufacture of paper upon a modern basis and with modern equipment also is developing in China. The manufacture of paper in the Far East for Eastern countries generally has been the subject of special reports from this office from time to time, and in a general way the situation has not changed from that heretofore outlined. In various parts of the Far East paper-making enterprises have been undertaken with varying success. The paper industry has been established in Japan in a modern way, and this has had a marked effect upon some lines of trade in Hongkong, particularly in cheap wrapping papers. In Indo-China and in Formosa mills have been established for the manufacture of paper or paper pulp from bamboos, but the enterprise is of doubtful success in each case, for it has been announced recently that the Formosa enterprise has lost money to such an extent that the company exploiting it is about to give up the enterprise. In Indo-China the Hongkong company operating a pulp mill has practically lost its entire capital, though company officials report that at present the mill is turning out pulp satisfactorily and that it will probably be a paying investment after reorganization. At Kongmun, near Hongkong, a small mill with modern equipment has been established for the manufacture of wrapping paper from rice straw, and this is reported to be a fair success, turning out from 8 to 10 tons of paper per day. In Hongkong itself a mill established several years ago for utilizing rags, waste paper, and other materials in the manufacture of cheap paper has come into the possession of Chinese interests, who are now manufacturing a cheap light-weight white printing paper for the use of Chinese newspapers. The paper is manufactured largely from pulp from India and the output is between 8 and 10 tons per day. There is a demand for the entire output among the Chinese daily papers in Hongkong and other Chinese papers published in the immediate vicinity of Hongkong. Other establishments are to be found with more or less modern equipment at various points in south and central China, but on the whole and with the exception of the cheap white paper for local use manufactured in Hongkong the actual competition with foreign papers from these mills is less serious as regards native consumption and the great field for foreign paper in China than the competition of the old-fashioned handmade Chinese papers. The field for foreign papers in China will be very large when the prices for the product come within the range of Chinese purchasing power.

The rise of the Chinese colloquial newspaper in the past few years has had a marked effect upon the trade, and that development is merely illustrative of the general increase possible. There is every reason to expect indefinite expansion of the trade in the near future if prices will permit. The United States has had almost no part in the trade, for the reason, as indicated by importers here, prices and qualities all considered American papers are more expensive than those from north Europe and Japan.

As a rule, competition in the South China market at present is keen and Hongkong importers are well looked after, as there are always foreign agents of paper manufacturers stationed in Hongkong—a marked change from seven or eight years ago, when none of these representatives came to the Far East and all orders went direct to exporting countries. One criticism heard in the course of the investigation of the paper trade in Hongkong was that the American exporters, although rather keen to reach this market in a larger way than at present, were somewhat dilatory in the fulfillment of orders, and as the local importers do not buy in large quantities they have been unable to wait the six or seven months usually necessary for the execution of their orders from the United States.

MUKDEN.

From Consul General Fred D. Fisher.

Practically all the foreign paper used in this district is marketed here by Japanese merchants, who buy from the Haku Shin Sha, of Tokyo and Osaka, Japan, which firm handles all grades of foreign papers as well as the different grades of Japanese papers. This firm imports into Japan all classes of foreign paper required for the markets and reexports to Manchuria at quoted prices less 20 per cent, which represents the amount of refund allowed by the Japanese customs on foreign paper reexported to Manchuria.

There are 16 newspapers published in this district, the total daily circulation of which is about 25,000 copies.

I have been informed by the Japanese paper dealers here that the profits on the sales of Japanese paper are very small, owing to the high cost of production in Japan. They state that a portion of the paper sold by them for the printing of newspapers is of American manufacture, and they are of the opinion that the market for the cheaper grades of American news paper could be somewhat extended, provided arrangements could be made for direct intercourse between the United States and this district, and provided that the American manufacturers allow terms equal to those of the Haku Shin Sha as to time and credit. Some of the Japanese firms here have expressed a willingness to act as representatives of American paper if allowed liberal terms, but state that they are not in a position to place orders for more than about 5,000 yen ($2,490 U. S. currency) at a time.

There are no Chinese firms here doing an extensive import trade in foreign papers, and such as are engaged in local transactions buy in small lots from Shanghai. Most of the foreign paper required by the Chinese consumers is purchased from the Japanese representatives of the Haku Shin Sha. The Chinese Government printing office here uses about $10,000 worth of foreign paper annually. Most of this is purchased from the Japanese paper dealers.

There is one foreign firm here dealing in Norwegian tissue paper and paper for the printing of newspapers. This firm sells annually about 500 bales of the latter, each bale containing 14 reams of 500 sheets to the ream, and is sold here at about $1.43 per ream; and about 250 bales of the tissue paper, each bale containing 25 reams of 500 sheets to the ream, and is sold here at about $0.72 per ream.

The Japanese paper dealers here are well acquainted with the requirements and conditions of the market and are able to estimate the amount annually required. Owing to close proximity of Japan to this district, they do not carry in stock more than enough paper to meet a month's supply. The Haku Shin Sha quote their prices in Japanese gold yen, and the dealers here are obliged to contract their sales and prices in local Chinese small coin dollars, which fluctuate in value from about $1.16 to $1.36 small coin to a Japanese gold yen. This, therefore, occasions a question of exchange, and owing to the large stocks of foreign and Japanese paper carried by the Haku Shin Sha, and owing to their close proximity to the market, it would seem that they are thus far at an advantage, and their commission as a medium between the foreign manufacturers and the consumers here would be offset by favorable exchange rates, as compared with the time required to receive shipments from America, and the uncertainty of exchange rates at the time of arrival. However, it would seem that these obstacles could be removed by securing representatives among the merchants here who could carry in stock enough of the required grades of paper to keep supply ahead of demand.

MARKET REQUIREMENTS.

Owing to the absence of any classified statistics, it is impossible to estimate the quantities of the different grades of paper annually consumed in these markets.

The demand in this district for foreign writing paper, including bond, ledger, and linen papers, is extremely limited, as these classes of paper are not adapted to the requirements of the Chinese in their daily official and commercial transactions, and owing to the small demand therefor, very small amounts of the cheaper grades only are carried in stock. In the Chinese postal, telegraph, and customs services, however, where pen and ink are in use, there are used cheap grades of foreign paper for the printing of forms, books, etc., which are generally supplied by the head offices at Shanghai.

The representatives of foreign Governments here generally receive their supplies from their respective Governments, and therefore purchase very little locally.

As the Japanese, in their larger firms and business organizations, have discarded the old-fashioned brush for the steel pen, there is a limited demand for certain foreign grades of paper. The only Japanese organization in this district using a consequential amount is the South Manchuria Railway Co., whose purchasing department is at Dairen.

Book papers.—There is very little demand for book papers here. Most of the books published in this district are printed upon a soft quality of Chinese paper.

News paper.—Practically all the paper used in the printing of newspapers in this district is of foreign manufacture. I have been unable to ascertain the country of production of the news paper reexported from Japan to this district. The news paper coming from Shanghai is mostly of Norwegian manufacture. The size of this paper is 31 by 43 inches, and it is shipped in bales of 12, 13, and 14 reams, 500 sheets to the ream. The prices of that coming from Japan are $1.18 per ream (37 pounds) and $1.33 per ream (42 pounds), and that of Norwegian manufacture $1.43 per ream (37 pounds).

Wrapping paper.—There is no demand for foreign wrapping paper here. Most of the shops use old newspapers for wrapping purposes, which they buy from Shanghai at about $1.94 to $2.78 per 100 pounds.

Tissue paper.—Various grades of tissue paper are used in printing the cheaper publications of Chinese books and pamphlets. There is a fair demand for the thicker grades of tissue paper. There is an annual sale of 250 bales of a Norwegian tissue paper, 25 reams per bale, 500 sheets per ream, size 31 by 43 inches, $0.72 per ream. Statistics as to the country of production of the various other kinds on this market are not obtainable.

Wall paper.—The demand for foreign wall paper here is very limited. The Chinese population use a cheap grade of wall paper of Chinese manufacture, purchased at Shanghai. The colors mostly used are white, and blue and white. This grade of wall paper is sold in bundles of 90 sheets at about $0.08 per bundle.

Board paper.—The demand for pressed board paper is very small. Such as is used is supplied by the Haku Shin Sha, and is sold in bundles of 45 sheets at $1.15 per bundle.

Paper for social and commercial correspondence.—The foreign paper, such an amount as is used here, for social and commercial correspondence is of a common grade, and as most of the foreign firms here buy from Shanghai or Tientsin, there is very little carried in stock.

HOME PRODUCTION.

There are 10 small paper mills in Mukden, making annually about 3,000 bundles of a grade of paper used for papering over Chinese window sashes, one bundle containing 190 sheets. This paper is made in two sizes, 16 by 16 inches and 19 by 20 inches, the former costing $0.37 per bundle and the latter $0.52 per bundle. This paper is made of hemp and the methods of its manufacture are very primitive. As competitors of foreign manufacturers, these mills may be considered of no consequence, as their productions are of one peculiar grade and are consumed locally.

IMPORT TRADE.

Following are statistics of the importation of paper into Manchuria during the years 1911 and 1912. Statistics of quantities imported by different countries are not obtainable, as the customs returns do not classify importations by countries.

Customs classification.	1911	1912
Paper . . . tons	3,206	3,915
Value, United States currency	$180,567	$197,425
Cigarette . . . mille	236,865	255,952
Packing . . . tons	229	219
Printing . . . do	141	220
Wall—value, United States currency	$7,317	$10,894
Writing . . . tons	31	28
First quality . . . do	260	291
Second quality . . . do	1,593	1,275
Joss [a] . . . do	17	9
Lohai (joss) [a] . . . do	7,912	5,519
Other kinds—value, United States currency	$11,571	$13,486

[a] Paper used in making offerings to the dead.

There have been no apparent changes in the trend of the import trade. As stated before, the Haku Shin Sha of Japan carries in stock such grades of Japanese and foreign papers as it, from experience, knows the market require.

The special factors influencing the sales of the Haku Shin Sha are its close proximity to the market, favorable terms as to time and credit, and its readiness to fill orders, however small they may be. A merchant by dealing with this company is enabled to carry a small stock of all the different grades of paper required by this market, with a very limited investment of capital.

NANKING.

From Vice Consul A. W. Gilbert.

All figures in this report are in United States equivalents. The values are computed at the rate of 1 haikwan tael to $0.74 gold. The native product is almost entirely imported from Nanchang, the capital of Kiangsi Province, and has steadily declined during the years above named. This decrease may be due to the inability of the native merchant to recover as rapidly as the foreign trader from a political uncertainty in China as well as to the political unrest itself.

Papers handled by Nanking wholesale dealers, with sizes, prices, amount consumed annually, and sources of supply are listed in the following table:

Number.	Local name.	Size of sheet.	Wholesale price.	Annual consumption.	Uses.	Origin.
	CHINESE.					
		Inches.	*Per cwt.*	*Cwt.*		
1	Piao hsing	17 by 22.	$4.00	34,000	Wrapping	Nanchang, Kiangsi
2	Fan hsi	6 by 8.	.35	40,160	do	Do.
3	Kan ku	6 by 16.	2.25	4,440	Match tapers	Do.
4	Mao pien	22 by 48.	4.00	5,376	Writing, windows, toys, etc.	Do.
5	Kwan san	18 by 31.	4.00	4,301	Books	Do.
			Per ream.			
6	Yuen su	18 by 20.	.40		Writing	Soochow, Kiangsi.
7	Ping kwang	18 by 24.	5.00		Window, etc	Nanchang.
			Per cwt.			
8	Hong nien	25 by 45.	7.00	2,800	Fans, scrolls	Do.
9	Tze ching	9¾ by 15.	.70	14,667	Firecracker, plaster, packing.	Do.
10	Tso pen	18 by 31.	17.00	15	Petitions, memorials	Do.
11	Tai ho pien	23 by 51.	4.00		See No. 4	Do.
12	Ch'ien chih	4½ by 5.	1.60		Paper money	Do.
			Per ream.			
13	An pih	20 by 27.	.75		Fur lining, windows, etc.	Do.
	FOREIGN					
14	Yiu kwang	22 by 44.	.62		General	Shanghai.
			Per cwt.			
15	Yuan yun	26 by 45.	5.00		do	Do.
16	Kwang yun	25 by 44.	5.50		do	Do.
			Per ream.			
17	Tung yang	18 by 20.	8.00		do	Do.
			Per lb.			
18	Dowling	27 by 40.	.45		do	Do.
19	do	27 by 40.	.65		do	Do.
			Per ream.			
20	do	22 by 44.	1.30		do	Do.
21	Wang kwang	25 by 44.	1.00		do	Do.
22	Pao chih	31 by 42.	1.03		do	Do.
23		25 by 44.	.88		do	Do.
24	Moa tsao	31 by 43.	2.33		do	Do.
25	Piao kuo	25 by 44.	1.56		do	Do.
26	Nah kwang	20 by 30.	1.56		do	Do.

Paper was imported into the Nanking consular district as follows during four recent years:

		1909	1910	1911	1912
Foreign	hundredweight	9,251	13,587	23,772	36,441
	value	$51,315	$61,591	$91,362	$134,317
Chinese	hundredweight	129,395	86,233	80,627	81,558

The terms given are from two to nine months, with increased interest if not paid within three months, and cash. Under normal conditions (which have not existed during the past four years), a dealer will place an order to be filled in installments at stated intervals. Most of the dealers expressed a willingness to deal directly with foreign exporters. None of them speak or write in any but the Chinese language.

NEWCHWANG.

From Vice Consul George F. Bickford.

The market for paper in Newchwang is small. Of the 1,006 tons of foreign paper imported through the maritime customs during 1913, it can be safely stated that only a very small proportion is of a high grade. Most of the foreign paper imported into Newchwang comes from Japan and is of a cheap grade used by the native newspapers. A small quantity of newspaper stock, probably of German origin, is supplied through Shanghai. There are only two or three native newspapers here, and as their circulations are limited, no large field is offered for the sale of this kind of paper.

From information at hand it appears that the wholesale price of newspaper stock locally at the present time is about $1.33 a ream for 60-pound paper measuring 32 by 44 inches.

Yellow, green, red, and other colored papers are used quite extensively for advertising posters. The wholesale price of this paper is about $1.41 per ream. The common size is 25 by 37 inches, weighing from 30 to 80 pounds per ream. Most of the local job printing is done by small Japanese shops, who import the paper of American and European manufacture they use through Japan.

SHANGHAI.

From Vice Consul General Nelson T. Johnson.

In preparing this report on the market for paper of all classes in this consular district, which means of course the large distributing center of Shanghai, I have adopted the paper classification used by the Chinese customs in their statistical records.

The paper found in this market may be divided into three large classes as follows:

1. Local handmade papers, the product of individual Chinese handicraftsmen, characterized by its soft texture and absorbing qualities. These characteristics are due, probably, to the fact that the Chinsee workman has no means of calendering his product. The paper, however, is well suited to its uses, that is, printing from carved wooden blocks coated with India ink (lampblack) dissolved in water, and writing with a soft camel's hair brush which has been wetted with the same ink. This paper is made of many materials, among which the most prominent are bamboo pulp and cotton.

2. Shanghai mill-made paper. There are three paper mills located at Shanghai, only two of which are running. One of the latter is a Government instituted concern now run by means of private capital. The other is a private company managed by Anderson Meyer & Co., a Danish firm which does a general import and export business in China.

3. Foreign imported papers. These papers are covered by the classification of imported papers which is treated in full below.

MARKET REQUIREMENTS.

Generally speaking, the quality of paper demanded by this market is the cheapest obtainable in each class, with the exception of those which are almost entirely used by the foreign population. This latter demand is for writing papers, higher grades of wall paper, etc., and is of course very limited. There does not appear to be any reason why American papers should not be sold in competition with other foreign papers to be found in this market, if the American producer or manufacturer is willing to study and meet this demand for cheap paper.

Taking newspapers as an instance, Chinese newspapers published in Shanghai are circulated all over China, and yet they have very small circulation when compared with papers published in the United States. The most expensive and at the same time widely read Chinese newspaper published in Shanghai may be had for the equivalent of $6 gold by the year. By the month it costs about 40 cents gold and it sells fresh on the streets for 1½ cents gold per copy. After it has been on the streets for some time the selling price drops a half or two-thirds. If the reading public—which in China would correspond to the more or less well-to-do class, to which the newspaper caters—will not pay more than this for their paper it is easily seen that the newspaper can not afford to pay very highly for its paper. The same applies to the book-making trade. The Chinese book publishers are busy trying to meet the demand for cheap books in the schools and homes. They are not turning out editions de luxe on fine laid paper.

The whole of the local market is supplied through commission houses, who are doing business in many classes of goods on a small commission. In this fact there is presented another characteristic of the local trade which must be taken into account by the American paper manufacturer and dealer. The paper business being conducted on a very small margin of profit, these commission houses are unable, or at least very unwilling, to lock up capital in the large stocks that are necessary to meet the ever varying demand of the paper market. The only way to get around this difficulty is to make shipments on consignment or to show a willingness to consider easy credit terms for the local importer.

The market is also characterized by the same keen international competition which is found in all other business in foreign products in China. This competition is successfully met by the local firms by engaging special and expert paper men who follow the market closely and go personally to the Chinese buyer with samples and stock. They must be ready to meet instantly every new phase of the demand. These experts are usually directly connected with some paper manufacturing or purchasing house in Europe which keeps them furnished with quotations c. i. f. Shanghai, and also does their purchasing and shipping for them at that end.

VARIOUS PAPER IMPORTS.

Art paper.—This paper comes principally from Germany and Great Britain. The entire supply imported in 1913 came from Europe. It is used in the printing of books, the printing of half-tones, and lithographing. There are a number of local publishers who use such papers, among whom the principal are the Commercial Press, the Methodist Publishing House. Presbyterian Mission Press, China National Press, and the North China Daily News publishing house. In 1913 the total value of the importation of this class of paper was $5,189 gold. Of this amount it appears that only $143 worth was reexported to other parts of China, leaving the estimated local consumption valued at $5,046. It sells at 3d. (6 cents) per pound c. i. f. Shanghai, approximately.

Absorbing paper.—This class covers a wide range of soft absorbing papers which are competing with the finer grades of Chinese handmade book and writing papers. The supply of this class of paper imported during the year 1913 was valued at $15,296 gold. It came almost entirely from the mills of Sweden. Small lots were brought in from Germany and Norway. Of this there appears to have been reexported a quantity valued at $12,776, leaving the estimated local consumption at $2,520. This paper costs in this market from 2d. to 3d. (4 to 6 cents) per pound c. i. f. Shanghai.

Bank-note paper.—Until lately there appears to have been a very fair demand for this class of paper for the printing of notes issued by the various Government and other banks throughout the country. This market has been practically wiped out by the action of the central Government in prohibiting the indiscriminate issuance of bank notes. During 1913 the value of the importations of this class of paper was $86,104 gold. The supply came from Japan, the United States and Great Britain. Of this amount there were reexportations valued at $50,666, leaving the estimated local consumption at $35,438. This paper costs from 1s. 6d. (36 cents) to 2s. (48 cents) per pound c. i. f. Shanghai.

Blotting paper.—Of this class of paper the largest supply came from Great Britain in 1913. Small quantities were also brought into the market from Italy and the United States. The total value of these importations was $4,570 gold, of which there was reexported a quantity valued at $37, leaving the total local consumption estimated at $4,533.

Cardboard.—The principal sources of the supply of this class of paper for the year 1913 were Germany, the United States, Sweden, Great Britain, and Japan. The total value of the importation during that year was $29,309 gold. Of this there was a quantity reexported to other parts of China valued at $804, leaving the estimated local consumption valued at $28,505.

Cartridge paper.—The value of the importation of this class of paper during 1913 is given as $18,175 gold, all of which appears to have been consumed locally. This sells for about 2½d. (5 cents) per pound c. i. f. Shanghai. The supply came principally from Sweden. Small quantities were brought in from Great Britain and Austria. The paper is used for drawing purposes in the schools.

Cigarette-making paper not exceeding 2 by 4 inches.—This paper comes almost entirely from Austria and Belgium. It is imported in small packets for the use of the individual smoker who prefers to make his own cigarettes. The value of the importation of this class of paper during the year 1913 was $8,086 gold, of which a quantity was reexported valued at $225, leaving the estimated local consumption valued at $7,861.

Cigarette-making paper in bobbins.—There is a special trade in this kind of paper to meet the demand made by the British Cigarette Co. which manufactures large quantities of cigarettes to supply local markets. It is classed according to width. I am informed that the local cost of this paper c. i. f. Shanghai would be approximately 1s. 6d.

(36 cents) to 3s. (73 cents) per bobbin of 1,560 meters. The total value of the importation of this class of paper during the year 1913 was $69,662 gold. Of this there was reexported a quantity valued at $10,223, leaving the estimated local consumption valued at $59,439. This class of paper came principally from Great Britain, Germany, and Austria.

Cigarette-making paper, not otherwise classified was imported during 1913 to the total value of $6,900 gold, with reexports valued at $1,779. This left the estimated local consumption of this class of paper to be $5,121. This paper came from Great Britain, Austria, and Germany.

Colored paper.—The value of the importation of this class of paper during 1913 was $133,392 gold, with reexports valued at $38,776, thus leaving the estimated local consumption $94,616. This paper came chiefly from Austria, Sweden, Belgium, Germany, and Norway, in the order named. It costs about 1¾d. (3½ cents) per pound c. i. f. Shanghai. The paper is used for wrapping purposes and for the printing of handbills and other advertising matter. Colored printing paper, not otherwise classified, was imported during 1913 to the total value of $19,113 and reexported to the value of $941, leaving the estimated value of the local consumption at $18,172. This unclassified paper came chiefly from Sweden, Norway, Great Britain, Austria, and Germany.

Copying paper.—This class of paper was imported to the total value of $5,092 gold, and reexported to the value of $348, leaving the estimated local consumption to be valued at $4,744. The supply of this paper came principally from Japan and Great Britain.

Embossed paper.—This paper should properly be included in the class named wax, paraffin or grease-proof paper, as it is the same kind of paper. It is used locally for wrapping and other similar purposes where a water or grease proof paper is required. The total value of the importation of this class of paper during 1913 was $6,688, with reexports to other parts of China valued at $138, leaving the total estimated value of the local consumption at $6,550. The supply came principally from Belgium, Austria, Sweden, and Germany.

Drawing paper.—Drawing paper to the value of $8,274 gold was imported into Shanghai during 1913, of which $1,719 worth was reexported, leaving the local consumption valued at $6,555. The supply came principally from Austria, Great Britain, and Italy. It is used in the schools and the demand naturally coincides more or less with the school seasons.

Enameled paper.—This class of paper probably covers a variety of papers known in the trade as flint papers. It sells at about 6s. ($1.44) per 500 sheets c. i. f. Shanghai. The value of the importation during 1913 is placed at $108,232, with no reexports. It is therefore estimated that the total import was consumed locally or remained in local stocks at the end of the year. The supply of this paper came principally from Great Britain and Sweden.

Hongkong second-quality paper.—Importations of this paper appear in the customs returns valued at $3,516. None of this appears to have been reexported.

Marble paper.—Such papers sell locally at about 10s. to 20s. ($2.43 to $4.87) per ream of 500 sheets c. i. f. Shanghai. It is used in the bookbinding business. The total value of the importation of this class of paper for 1913 is placed at $1,789 gold. None of this paper appears to have been reexported. The supply came principally from Belgium and Austria.

Machine-glazed cap (medium grade cap).—There is a very large demand for this class of paper, especially the lighter weights. It should probably be classed with tissue paper, as the uses to which it is put are in many ways the same. This class of paper, found in this market, costs c. i. f. Shanghai about 1½d. to 1¾d. (3 to 3½ cents) per pound. The total value of the importation of this class of paper during 1913 is placed at $539,523, with reexports valued at $162,930, leaving the estimated local consumption valued at $376,593.

One of the wants of the trade which has been met by this paper is found in the Chinese book-publishing business. Since the beginning of printing in China the Chinese printer has been in the habit of using only one side of his paper, owing to the fact that the soft absorbent nature of the paper permitted the ink to show through. The Chinese bookmaker overcame this difficulty by doubling the page over so that the unprinted side was turned in. Machine-glazed cap paper with its single glazed surface is used in the same way, the glazed side being turned out to take the print. There is a very keen international competition to meet the demand for this paper. Those countries appear to have been most successful which are located nearest the source of supply of wood pulp. The supply which came into this market during 1913 came principally from Sweden, Norway, Germany, and Austria. There appears to be a question whether American paper manufacturers can meet the demand for this particular grade of paper with a profit to themselves. While local dealers do not see any obstacle in the freight rates they argue that the countries above named have specially adjusted machinery for the manufacture of this paper and that American mills would have to expend a good deal of capital in adjusting their present machines or installing others. American paper dealers who have entered this market and who are competing to meet the demand for this class of paper purchase their supplies from the specially equipped European mills.

Packing and wrapping paper.—This is another class of paper which finds a good demand locally. The returns show the total value of the importation into Shanghai for 1913 to be $158,650.98 with reexports valued at $23,694, leaving the estimated local consumption at $134,956. The prices range from 1¼d. to 1½d. (2½ to 3 cents) per pound c. i. f. Shanghai. The supply came principally from Sweden, Germany, Belgium, Great Britain, Norway, and Japan.

Parchment.—This class of paper, known to the trade as "imitation parchment," is used locally for the printing of share script and like work. I understand that it has been somewhat superseded in the market by a new paper called "Simili," which is dealt with below. The gross value of the importation of this class of paper during 1913 is given in the customs records as $8,761 gold, with reexports valued at $1,457, leaving the total estimated local consumption valued at $7,304. The supply came principally from Sweden, Great Britain, and Belgium.

Printing paper calendered and sized.—There appears to be a large demand for this class of paper, the customs figures giving the total importation during 1913 as $357,099 gold, with reexportations to other parts of China valued at $71,831. This leaves the estimated local consumption valued at $285,268. These papers cost from 1¾d. to 2½d. (3½ to 5 cents) per pound c. i. f. Shanghai. The supply comes chiefly from Great Britain, Austria, Sweden, Germany, Norway, Belgium, and the Netherlands.

Printing paper calendered and sized from Japan costs about 1½d. to 2¼d. (3 to 4½ cents) per pound c. i. f. Shanghai. This paper comes entirely from Japan. The total value of the importation during 1913 was $28,522 gold, with reexports valued at $491, leaving the estimated local consumption valued at $28,031.

Printing paper, uncalendered and unsized.—During the year 1913 the value of the importations of this paper was $425,236 gold, while there were reexportations to other parts of China valued at $123,891, leaving the estimated local consumption valued at $301,345. This costs c. i. f. Shanghai 1¼d. (2½ cents) per pound. The supply came principally from Sweden, Germany, Austria, Norway, Great Britain, and Belgium.

Japanese printing paper, uncalendered and unsized, costs c. i. f. Shanghai about 1¼d. (2½ cents) per pound. The value of the importation during the year 1913 is given as $23,992, with reexports valued at $10,128, leaving the estimated local consumption valued at $13,864.

Paper, printing, unclassed.—Unclassed printing paper was imported during the year 1913 to the value of $15,788, with reexports valued at $1,696, leaving the estimated local consumption of this kind of paper valued at $14,092. This paper came chiefly from Great Britain, Sweden, Germany, Belgium, and Austria.

Simili paper.—This paper has gained in local popularity to the disadvantage of other imitation parchment papers by reason of its cheapness and good color. The supply comes chiefly from Austria and Sweden. It costs locally about 2d. (4 cents) per pound c. i. f. Shanghai. The value of the importation of this class of paper during 1913 is given in the customs records as $20,481 gold, with reexports valued at $3,819, leaving the total value of the local consumption $16,662.

Strawboard.—There appears to be a good demand for this rough cardboard for bookbinding, backs for writing pads, and other similar uses. The value of the importation of this class of paper during 1913 was $54,004 gold, while there were reexports valued at $3,998, leaving the estimated local consumption valued at $50,006. This costs about £5 to £8 ($24.33 to $38.93) per ton c. i. f. Shanghai.

Tissue.—This class of paper finds a large demand locally, as it competes with the Chinese handmade letter papers of the better grades. The value of the importation for 1913 is given as $75,719, with reexports valued at $18,046, leaving the value of the estimated local consumption at $57,673. As found in this market it costs c. i. f. Shanghai about 4d. (8 cents) per pound. The supply was brought in chiefly from the mills of Norway, Sweden, Germany, and Austria.

Toilet paper.—Of this class of paper there was imported during the year 1913 a quantity valued at $4,608, with reexports valued at $189, leaving the value of the estimated local consumption at $4,419.

The chief sources of supply were Japan, Great Britain, and the United States.

Paper wadding.—The supply comes principally from Japan and costs about $12.64 (Shanghai taels 20.632) per bale of 100 "taos" of 100 sheets each. This paper finds several uses among the Chinese, one of which is in the making of lined and wadded fur garments, the paper being placed between the cotton wadding and the silk. This paper is also used, among the coolies who go from Shantung into Manchuria, to wad their garments as protection against the cold. The total value of the importations of this paper during 1913 is given in the customs records as $75,397 gold, with reexportations valued at $26,447, leaving the value of the local consumption at $48,950. The supply came chiefly from Japan. There was a small lot brought in from the United States.

Wall paper.—All grades of wall paper find a demand in China, but that for the better grades is limited to the foreign communities. The cheaper grades find quite a demand among the Chinese, who use it for the making of small boxes as well as for ceilings. This cheaper grade of paper is imported and sold in rolls averaging 20 and 22 inches in width, 8 yards to the roll,and costs c. i. f. Shanghai about 2d. (4 cents) per pound. The value of the importation of this class of paper during 1913 is given as $34,586, with reexports valued at $21,536, leaving the estimated local consumption valued at $13,050. The supply came principally from Sweden, Great Britain, United States, and Belgium.

Wax, paraffin, or grease-proof paper.—The gross value of the importation of this class of paper into Shanghai for the year 1913 is given as $10,819, with reexports valued at $984, leaving the estimated value of the local consumption at $9,835. It costs about 3d. (6 cents) per pound c. i. f. Shanghai. The supply came principally from Germany, Great Britain, United States, Sweden, and Japan. It is used chiefly for wrapping soap.

Writing paper or foolscap.—The gross value of the importation for 1913 is given as $71,467, with reexports valued at $2,648, leaving the estimated local consumption valued at $68,819. It costs about 3d. (6 cents) per pound c. i. f. Shanghai. The supply has come chiefly from the mills of Great Britain, United States, Sweden, Austria, and Italy. The local demand is for a good medium quality of writing paper.

Other kinds of paper.—This covers a large variety of paper which came in in small shipments under such trade names as insulating paper, imitation leather, cartons, screens, charta foil, tram tickets, etc., and was imported to a total value of $70,736, with reexports valued at $23,524, leaving the total value of the estimated local consumption at $47,212. This unclassified paper came from the mills of Sweden, Belgium, United States, Great Britain, Germany, and Japan. One kind of paper which finds a very good demand locally, although it does not appear in the customs figures, is known to the trade as staining paper and is used for the making of the red paper upon which the old-fashioned Chinese calling cards were printed. The red stain that is put on this paper does not go through. The chief source of supply appears to be Germany and the European mills. It costs c. i. f. Shanghai about 1½d. (3 cents) per pound.

The customs records contain statistics of one other class of paper known as pith paper. It comes from Japan and Formosa and is made from the pith of a certain tree. The pith is shaved around and around its circumference, and upon the thin shavings or parings are printed or hand painted small miniature pictures. The value of the importation of this paper into Shanghai for 1913 is given as $3,842.

VALUE OF IMPORTS.

The total value in gold of the above import trade in paper for Shanghai for the year 1913 is $2,538,366. Of this trade the most important papers appear to be colored papers, flint or enameled papers, machine-glazed cap, packing and wrapping papers, calendered and uncalendered printing paper (which covers newspapers), tissue paper (including the class called absorbing paper), and wadding paper. While the market is a good one for these papers, local dealers complain that, whereas European manufacturers and dealers have made a careful study of the China trade and are endeavoring to manufacture paper which the Chinese want, they universally find that the American manufacturer wishes to push what he is manufacturing. It seems to be admitted that the quality of American paper is superior to that produced in England and on the Continent, but the prices are so much higher that the Chinese trade is not attracted. Another complaint is that the American manufacturer and dealer refuse to'consider the conditions under which the local commission merchant has to do business in regard to exchange and credit terms. Credit terms usually granted in the trade here are, I am informed, four months. European firms are always able to quote prices c. i. f. Shanghai, which is a great item in their favor.

LOCAL PRODUCTION.

Of the two local paper mills now running the most important from a commercial point of view is the Shanghai Paper Mill (Ltd.), managed by the Danish firm of Anderson, Meyer & Co., a local commission house engaged in a general import and export business. This mill was erected originally by Japanese engineers and is equipped for the most part with American machinery. Three machines are operated, as follows:

Machine No. 1, manufactured in Beloit, Wis., is engaged in the manufacture of white tissue or absorbing paper at the rate of 11,000 pounds per day. This paper is intended to compete with the better grades of Chinese handmade writing and printing papers. It is manufactured of rag pulp made by the mill from locally purchased rags. I understand that the local supply of such rags is fairly plentiful, costing at wholesale about $1.50 gold per picul of 133⅓ pounds. The mill consumes about 3,000 piculs of rags per month.

Machine No. 2, manufacuted at Bury, England, is being devoted to the manufacture of machine-glazed cap, with a daily output of 8,000 pounds. The manufacture of this paper necessitates an arrangement of the machine whereby a glaze is given to one side of the finished paper. This is done by a system of rollers. The paper is manufactured from wood pulp imported from Norway, costing for the mechanical pulp about $30 gold per ton and for sulphite pulp about $50 per ton. To these prices, which are approximate, must be added a 5 per cent import duty and 2 or 3 per cent to cover delivery and other charges. There is no local supply of wood pulp available for the manufacture of paper. The nearest forests available for such purpose are those of North Manchuria:

The customs records give the following figures for imports of wood pulp into Shanghai during 1913:

Countries.	Pounds.	Value.
United States	60,635	$1,049
Norway	3,032,884	51,887
Sweden	688,385	9,435
Great Britain	822,462	13,110
Canada	223,994	4,699
Japan	280	6
Total	4,828,640	80,186

Other paper-making materials imported were valued at $1,865, of which $395 worth came from the United States, the remainder from Sweden.

Local mills pay an import duty on the pulp and then an export duty on the manufactured paper of 0.40 haikwan tael, equal to 0.29 cent gold (1 haikwan tael equals $0.73¼, the rate used in reducing all customs statistics used in this report) per picul of 133⅓ pounds.

Machine No. 3 was made at Beloit, Wis., and is engaged in the manufacture of a yellow joss paper, used entirely in the worship of the spirits at the graves in North China. It is yellow in color and when burned at the graves represents rolls of yellow silk. The daily output of this machine is about 5,000 pounds per day, which is small but can not be increased on account of the weakness of the paper, made of mechanical pulp, refuse strawboard, paper cuttings, and such similar material. The manufactured article sells wholesale for 39 to 46 cents gold per bale of 12 pounds. The machine is specially adjusted for the manufacture of this paper by doing away with all but two of the steam-heated rollers.

The canvas felts, wire-screen belts, beaters, and paper cutters and trimmers used in this mill are all of American manufacture. Power is derived from two horizontal steam engines fitted with Corliss valves and manufactured in Cincinnati. Tanks are being installed for the purpose of conserving the waste pulp left in the water which drains from the paper machines. These tanks and their parts have been brought out from Belgium. Other waste-saving devices are being installed, such as mechanical stokers for the Lancashire boilers. Coal is purchased from Japan.

LOCAL LABOR PRICES.

I am informed that the labor available locally (i. e., Chinese) is fairly efficient. In this mill there are employed a number of Japanese operatives who fill the responsible positions of foremen. They are employed because of their reliability, and it is claimed that they take a greater interest in their work than the usual Chinese operative. Another reason for their employment is the fact that they are more experienced in the paper-manufacturing industry than the Chinese. The highest-paid Japanese receives a wage of $75 Mexican per month, which is equal to about $37 gold. Such a man does the work that a foreman machinist would do in a mill in the United States. The highest-paid Chinese operative receives $40 Mexican per month, or about $20 gold. Ordinary Chinese operatives receive wages from 30 to 40 cents Mexican per day, equal to from 15 to 20 cents gold.

This mill is engaged in the manufacture of paper for the local market, such as can not be imported from abroad. The owners inform me that medium grade cap can be made much cheaper by the European mills, which have an inexhaustible pulp supply right at their doors, a large output, and the latest machinery. All of the paper turned out by this mill is packed in Chinese style, the bales being bound with split bamboo withes and marked with Chinese "chops" in red and black inks, just as the Chinese paper maker has been doing for centuries.

The other local mill now running is entirely under Chinese management. It was begun as a Government enterprise, but I understand that it is now being operated with private capital. It is said to be producing an inferior tissue paper from its two machines at the rate of about 20,000 pounds per day. The machinery is of American manufacture.

Exports of paper to Chinese ports or other parts of China in 1913 were valued as follows: Shanghai mill, gold, $250,181; wall paper and scrolls, $7,021; straw paper, $1,923; first-quality paper, $688; second-quality paper, $113; unclassed paper, $70. Exports to foreign countries, consisting of first-quality paper, amounted to $9,476.35.

Wholesale prices quoted by the Shanghai Paper Mill (Ltd.) are given in the table following. The prices have been converted from Shanghai taels at the rate of 1 tael equals $0.632 gold.

Kinds of paper.	Size of sheets.	Weight per bale.	Price per bale.
	Inches.	*Pounds.*	
White tissue	25 by 44	60	$2.53
Do	25 by 45	65	2.65
Do	25 by 45	70	2.78
Do	25 by 45	77	3.10
Do	25 by 45	85	3.29
Do	26 by 45	90	3.48
Do	25 by 44	65	2.46
Do	26 by 44	72	2.69
Do	29 by 54	92	3.95
Do	25 by 45	68	2.59
Do	24½ by 44½	80	2.78
Do	[a]10½ by 29	40	1.90
Do	17½ by 17½	150	5.37
Maopien, bluish	22½ by 51½	62	1.90
Maopien, cream	22½ by 51½	62	1.90
Do	22½ by 51½	110	3.32
Maopien imperial yellow, first quality	12½ by 16½	12	.57
Maopien yellow, second quality	12½ by 16½	12	.55
Maopien yellow, third quality	12½ by 16½	12	$0.50
Maopien yellow, fourth quality	12½ by 16½	12	.47
Medium grade paper	25 by 44	51	1.90
Do	25 by 44	51	1.71
Do	25 by 44	51	1.74
Do	25 by 44	85	2.91
Do	25 by 44	75	2.62
Do	37 by 40	110	3.48
Do	37 by 40	119	3.80
Do	37 by 47½	126	4.14
Do	25 by 44	510	17.06
Do	25 by 44	60	1.58
Wrapping	12 by 26	45	.95
Blue green	25 by 45	65	1.26
Vegetable green	25 by 45	65	1.26
Lilac	25 by 45	65	1.26
Brown	25 by 45	65	1.20
Bistre	25 by 45	65	1.26

[a] This is a letter size for Chinese use.

SWATOW.

From Vice Consul A. Krisel.

Foreign paper was first introduced into Swatow about six years ago and its use is becoming general. The Chinese still use native paper for stationery, however. Germany supplied most of the imported paper for printing newspapers at first, but Japan has now succeeded in securing first place. There are no special factors influencing import trade, except that prices are controlled by Hongkong according to the foreign market. The Chinese importers pay cash on delivery.

Imports of paper into Swatow, by quantities and values in United States currency, during 1911, 1912, and 1913 were as follows:

Countries and ports.	Classification.	1911		1912		1913	
		Tons.		*Tons.*		*Tons.*	
Hongkong	Printing	79	$7,652	98	$7,960	41	$2,342
	Packing		10	1	369	5	1,035
	All other	680	68,073	708	72,759	746	70,176
Chinese ports	Printing	27	2,529	8	715		
	Writing	29	2,488	40	3,105		
Japan	All other		389				43
United Kingdom	do	3	216		80		
Singapore	do				237		206

In the following table are given the export statistics for the same three years:

Countries and ports.	Classification.	1911		1912		1913	
		Tons.		*Tons.*		*Tons.*	
Hongkong	First quality	290	$43,987	397	$60,214	374	$56,773
	Second quality	1,412	107,193	1,847	159,247	1,555	136,694
	Cutting	5	226	20	843	33	1,424
	Joss	158	26,534	222	38,472	188	32,728
Tonkin	First quality	1,284	194,931	1,278	194,099	1,564	246,620
	Second quality	794	60,257	821	71,273	754	67,047
	Joss	541	79,735	643	111,621	689	119,671
Siam	First quality	58	8,777	125	18,962	93	14,158
	Second quality	508	38,549	531	47,508	397	34,479
	Joss	615	103,400	614	106,593	565	97,989
Straits Settlements	First quality	123	18,657	154	23,443	170	25,852
	Second quality	508	38,652	507	44,016	534	46,377
	Joss	841	141,396	743	128,907	834	144,653
Chinese ports	First quality	302	45,903	210	31,919	453	68,849
	Second quality	1,537	116,656	961	83,358	1,172	101,681
	Cutting	11	505	16	763	3	325
	Joss	1,005	168,933	1,325	220,883	1,413	245,481
To other places	First quality	15	2,225	10	1,462	13	1,977
	Second quality	3	215		6	2	141
	Joss	44	7,417	2	369	59	82,305

TIENTSIN.

From Vice Consul General P. R. Josselyn.

The Tientsin consular district comprises the Provinces of Chihli and Shansi, the whole of eastern Mongolia, together with that portion of Shantung and Honan which lies north of the Yellow River. The chief distributing point for this entire region is Tientsin. The sources of the paper supply for this region may be divided roughly as follows:

1. Locally made paper. This is all handmade paper and amounts only to a very small percentage of that used.

2. Chinese-made paper imported from the south. This may be divided into the handmade Chinese paper and the product of the Shanghai, Hankow, and other paper mills which operate under European methods. The handmade paper is Chinese writing paper, wrapping paper, paper for making Chinese books, and what is known as "joss" paper. The latter is made chiefly in Canton and Foochow, and a great amount is imported annually. In 1912 the Chinese paper of various kinds imported into this port amounted to 1,382,048 customs taels, which, at $0.741, equals $1,024,097 United States currency.

3. Imports from abroad. The total importation of paper from abroad for the year 1913 was 1,028,791 taels ($762,334). Of this amount 382,321 taels ($283,299) came from Japan, which is the largest importation from any one country. The customs returns show the bulk of the remainder as coming from Germany, Great Britain, and Sweden in the order named.

This paper includes almost all of the various kinds known to the trade, but the great business in paper is done in a low-grade printing paper, which is sold to the Chinese, and on which they print their newspapers, bills, and other similar work. Next to printing papers wrappings may be said to be in the greatest demand.

IMPORTED PAPER.

Writing paper.—Foreign writing paper is sold almost entirely to the foreign community in Tientsin and Peking, which numbers about 4,000 civilians in the two cities. There are in Tientsin two foreign book and stationery stores, carrying a more or less complete line of stationery, besides a number of general stores that carry stationery in connection with their general stock. Also there are about 10 Chinese printing houses doing job printing in English and other foreign languages and carrying a line of paper and stationery. The above are at present supplied largely through British and German houses, whose representatives call upon them at regular intervals. Only one of these stores that I visited (the largest) carried a stock of American writing paper, and that was a typewriting bond paper. The American writing paper seemed to be very well regarded by the trade, but it was stated that the price was too high for them to be able to sell very much of it; that they could sell an English paper which answered the same purpose for 25 to 33 per cent less and make a larger profit on it than they could on the American paper.

There are four railway lines and several large mining and other industrial concerns having their headquarters in Tienstin and Peking, all large users of paper of various kinds for forms, tickets; etc. They place their orders with the Tienstin printing shops, both foreign and Chinese owned. There is also some bank-note paper used by the Board of Finance, Bureau of Engraving and Printing, for the printing of Government notes and bonds, but the larger amount of this work is still done abroad. English bank-note paper imported here runs about 100 taels per picul, or 52 cents, per pound. The Japanese import an imitation bank-note paper which runs about 40 taels per picul, or 21 cents, per pound.

There is some demand for ledger paper, chiefly among the foreigners, the wholesale price averaging 6d. (12 cents) per pound.

Printing papers.—There are five foreign newspapers printed in Tientsin, three in English, one in French, and one in German. All of these papers do an extensive job-printing business. In addition there are about 20 Chinese newspapers. In Peking there are 3 foreign papers and about 15 Chinese papers. Also the large towns scattered throughout the district have each one or more newspapers. These newspapers are all printed on paper imported either from Japan or from Europe. The European paper comes from Sweden, Norway, or Denmark, but it is exported through British and German houses to the local importers, who in turn sell to the large Chinese paper dealers, and by them it is shipped into the interior and sold to consumers. However, in Tientsin the Chinese newspapers and printing shops often buy of the foreign importer direct, thus cutting out the middleman. This paper comes to Tientsin in bales of 12 reams, 500 sheets per ream, the most common size for printing being 31 by 43 inches. The bale is wrapped in canvas and battened at the ends. Great care is taken to have the bale securely wrapped, as it has to be transshipped at either Shanghai or Kobe, and unless very securely wrapped it is apt to suffer from rough handling. Contracts are made with the native paper dealers for deliveries covering six months of 200 to 300 bales per month.

Wrapping paper.—European-made wrapping paper is used quite extensively both by Chinese and foreigners. However, the Chinese-made wrapping still forms the bulk of that trade. The foreign stores in Tientsin and Peking use a considerable amount, as do also the foreign export houses, for wrapping hair, bristles, etc., for export. There is no demand for manila paper in the north, although I understand that it is used in the south of China.

Wall paper is sold to a limited extent among the foreigners and also to the Chinese. It is handled by both the foreign stores and also the larger Chinese shops. The average wholesale price is 8d. (16 cents) per piece of 8 yards. Tissue paper comes largely from Japan, although the Chinese make a kind of tissue paper which they use as a wrapping. The sale of blotting paper is limited.

There is quite a demand, by both foreigners and Chinese, for cover paper in various styles. American cover paper is sold in this market, but only to a limited extent.

Carbon paper used is of British or German make, and the demand for same is confined to the foreign community in Tientsin and Peking.

Strawboard comes almost entirely from Japan, the price here ranging from $80 Mexican ($37.50 gold) per ton up.

Binders' board is imported in small quantities from Great Britain and the Continent, but it is used only by foreigners and by the Chinese printing shops catering to the foreign trade. It comes in all the standard sizes.

MARKET REQUIREMENTS.

As stated above, the bulk of the trade here is in a cheap grade of printing paper for sale to the Chinese. As to the paper market among the foreign community, the demand is for a medium grade all through. There are no special requirements as to size, weight, finish, etc. Nearly all of the standard sizes are in more or less use, the three principal sizes in demand being 25 by 44 inches for medium-grade cap, 31 by 43 inches for printing, and 25½ by 50 inches for glazed printing.

There is a certain amount of paper produced by hand in the Provinces of Chihli and Shansi, and some of it is sold on this market. It is a very coarse wrapping paper. There are no paper or pulp mills in this district.

The export of paper from this port to other Chinese ports amounted in 1912 to only $505 United States currency, and no paper was exported to foreign countries.

IMPORT TRADE.

Following is a table showing the value in United States currency of the imports of paper into Tientsin for the past three years, by classes and countries:

Kinds of paper.	United Kingdom.	Norway.	Sweden.	Denmark.	Germany.	Belgium.	Italy.
1911.							
Printing, calendered and sized	$2,296	....	$2,040	....	$1,142	$274	$38
Printing, uncalendered and unsized	9,152	$2,706	1,257	....	41,951	2,971	....
Wall	5,555	....	....	....	1,947	303	....
Writing	4,663	....	....	....	1,151	....	159
Other kinds	9,880	....	24,006	$22	195,366	11,534	183
Total for 1911	31,546	2,706	27,303	22	241,557	15,082	380
1912.							
Bank note	1,275	....	....	....	....	....	....
Printing, calendered and sized	1,683	....	....	....	193	213	....
Printing, uncalendered and unsized	5,911	1,148	5,077	982	9,852	270	....
Wall	3,323	....	....	....	1,195	704	....
Writing	2,565	....	....	....	50	1,095	75
Other kinds	2,886	....	10,619	1,041	73,190	2,024	....
Total for 1912	17,643	1,148	15,696	2,023	84,480	4,306	75
1913.							
Bank note	....	....	....	....	222	....	....
Printing, calendered and sized	2,800	2,287	....	....	15,617	111	....
Printing, uncalendered and unsized	9,835	100	71,315	4,499	39,595	4,248	....
Wall	8,007	....	371	....	1,257	788	....
Writing	4,644	....	....	....	1,320	....	....
Other kinds	10,222	937	46,745	4,443	150,616	12,335	....
Total for 1913	35,508	3,324	118,431	8,942	208,627	17,482	....

Kinds of paper.	Austria.	Chosen.	Japan.	United States.	Total foreign countries.	Total Chinese ports.
1911.						
Bank note			$131		$131	$131
Cuttings			53		53	190
Printing, calendered and sized					5,790	2,770
Printing, calendered and sized, Japanese			6,958		6,958	
Printing, uncalendered and unsized				$828	59,502	17,348
Printing, uncalendered and unsized, Japanese			57,233		57,233	
Wall	$605		430	70	9,259	8,313
Writing	20		774	79	6,846	1,647
Other kinds	426	$10,041	111,300	1,851	370,227	40,130
Total for 1911	1,051	10,041	176,879	2,828	515,999	70,529
1912.						
Bank note			2,501		3,776	5,403
Cuttings			24		24	265
Printing, calendered and sized	282				2,370	1,484
Printing, calendered and sized, Japanese			8,187		8,187	
Printing, uncalendered and unsized	567				26,271	16,448
Printing, uncalendered and unsized, Japanese			69,253		69,253	
Wall			426		5,648	6,695
Writing			772		5,329	1,842
Other kinds	2,807	3,120	81,332	13	180,728	25,981
Total for 1912	3,656	3,120	162,496	13	301,586	58,118
1913.						
Bank note			5,668		5,931	5,728
Cuttings			27		107	676
Printing, calendered and sized				174	21,017	1,669
Printing, calendered and sized, Japanese			8,409		8,409	
Printing, uncalendered and unsized	923				130,687	14,612
Printing, uncalendered and unsized, Japanese			107,569		107,569	
Wall			87	283	10,776	9,022
Writing			1,738	228	8,251	1,563
Other kinds	6,146	4,195	159,751	2,227	402,459	33,885
Total for 1913	7,069	4,195	283,199	2,912	695,206	67,155

From the above it will be seen that Japan leads, while Germany is a close second. A considerable quantity of the paper shipped to the Far East from Germany and Great Britain is, however, Norwegian, Swedish, and Danish paper, and is shipped here through German and British houses. It is also stated that some of this European-made paper has been shipped to Japan and then reshipped to China as Japanese paper. A considerable quantity of Italian paper comes into this market, but as it comes either through Austrian or German houses the customs returns do not show any considerable importation from that country.

It will be seen that direct importations from the United States are very small, but I understand that American paper is shipped to Shanghai, to the American paper houses there, and by them sold to the dealers and others in Tientsin. This paper appears on the customs returns as coming from Chinese ports.

The importation of paper in 1913 was higher than in any previous year, amounting to 175,454 piculs, or 23,394,000 pounds, the largest previous year being 1910, with 115,578 piculs, or 15,372,000 pounds. In 1912, due to the disturbed conditions of the country, imports of all sorts declined to a marked extent, a great many of the orders being held back until 1913, which helped to swell the importations during that year.

All shipments to the port of Tientsin are transshipped at either Shanghai or Kobe, and during the winter months, when the river is closed, shipments must be landed at Chinwangtao, the winter port of Tientsin, and from there brought by rail to Tientsin. As a consequence shipments of paper frequently arrive in a damaged condition and it is necessary to exercise great care to see that the goods are properly baled.

It is vitally necessary for an American manufacturer or dealer who wishes to enter the market here to be prepared to quote a price c. i. f. Tientsin. This is the policy of the British and German houses. Drafts are usually drawn at three months' or four months' sight.

One of the difficulties of opening up a market for American paper in Tientsin is that there are comparatively so few American firms in a position to handle it. There are about 30 British and 20 German firms who do a general import business, while only 3 American firms of this class are located here. In addition, all of the foreign retail stores, newspapers, printing offices, etc., are British, French, or German. These people, while they are willing to do business with American paper houses, provided that terms, prices, etc., are satisfactory, can not be expected to push the American product where same is in competition with the paper from their own countries.

TSINGTAU.

From Vice Consul J. A. Bristow.

The principal market for paper imported through Tsingtau is with the Chinese, and paper imported largely from Germany but manufactured in part in Austria and the Scandinavian Peninsula forms the bulk of the trade in foreign papers.

Imports of paper into Tsingtau during 1911, 1912, and 1913 were as follows:

Kinds of paper and sources of supply.	1911	1912	1913
PRINTING PAPER (MOSTLY).			
Hongkong	$8,057	$11,477	$14,372
United Kingdom	....	....	258
Germany	77,666	59,882	176,994
Netherlands	18	74	....
Belgium	....	2,029	....
France	....	....	34
Austria-Hungary	....	....	41
Japan	613	1,632	2,705
UNCLASSED.			
Hongkong	1,018	543	332
United Kingdom	306	159	46
Germany	13,509	5,231	11,500
Netherlands	....	....	80
Belgium	136	269	44
Canada	....	....	139
Japan	355	168	173
CHINESE PAPER.			
Shanghai	422,562	768,184	793,246
Foochow	962	13,298	13,125
Canton	8,580	53,824	2,212
Chefoo	1,180	4,660	4,857
Hankow	1,649	2,129	785
Swatow	50,758	472	39,281

COCHIN CHINA.

From Vice Consul W. D. Kraft, Saigon.

The total imports of paper into this colony for the year 1913 amounted to $1,216,038 and was supplied by the following countries: France and its colonies, $509,748; China, $360,456; Hongkong, $298,347; United Kingdom, $14,882; Japan, $4,820; all other countries, $26,810. The paper used by the European trade comes almost entirely from France but is not high grade; that used by the natives and Chinese is very low grade.

On account of the damp climate, the use of wall paper is impossible.

So far there has been no attempt to manufacture paper from wood pulp, but about two years ago a company was started in Tonkin for the manufacturing of paper from bamboo, of which there is abundant supply, but it has not been successful, and has produced only a small amount of paper. It has recently been reorganized and, we understand, is again in operation.

The special factors influencing the import trade from the United States would be lack of direct shipping facilities and the high customs duties. Goods transshipped in transit are not granted the minimum tariff unless such transshipment is made at a French port and arrives in a French bottom. A shipment made from New York and transshipped at Marseille would be entitled to the minimum tariff.

INDIA.

CALCUTTA.

From Consul General James A. Smith.

In 1911 the number of paper mills in India was nine—three in Bengal, four in the Bombay Presidency, one in the United Provinces, and one in the Native State of Gwalior. The estimated capital of these mills was about $1,750,000. The value of the output reported in 1910 was $2,644,000; in 1911 it was slightly less, $2,595,000. The competition of cheap wood-pulp paper imported from Europe has had a tendency to check the development of paper making by older methods in India. The most successful mills are those which have Government contracts for the supply of cheap foolscap, blotting paper, note paper, and envelopes.

In 1907 the value of paper manufactured in India was $2,368,000. Imported paper was valued at $3,050,000. In 1911 the value, as stated above, of Indian manufactured paper was $2,595,000, while the value of imports of paper rose to $3,585,000. Imports increased therefore by about 16 per cent, while internal production gained by about 10 per cent. The industry throughout India employed in 1911 about 4,632 persons.

In the three mills in Bengal, located at Titagarh (two) and Raniganj (one), about 1,000 persons are employed. The entire output of the Indian paper mills in 1911 amounted to 59,441,000 pounds. Of this about 49,000,000 pounds were produced in Bengal, 8,000,000 pounds at Lucknow, and 2,500,000 pounds in the Bombay Presidency. In Bengal the output is chiefly blotting, cream laid, cartridge, writing, white printing, a common paper known as "Bedami," brown, and supercalendered writing. At Lucknow, brown paper, white printing, blotting, cream laid, white cartridge, Government stamped paper; in the Bombay Presidency, brown packing paper, white unglazed paper, country white paper, and writing, printing, and blotting papers are produced.

FOREIGN SOURCES OF SUPPLY.

The countries chiefly supplying India with paper are Great Britain, Germany, the Netherlands, Norway, Sweden, Austria-Hungary, and Belgium. For printing papers Great Britain, Germany, Austria-Hungary, Norway, and Sweden, in the order named, are the principal sources. Writing papers and envelops are imported chiefly from Great Britain, Austria, Germany, and Belgium. Pasteboards, millboards, and cardboards come principally from Great Britain, Germany, and the Netherlands, while of other kinds, including paper manufactures, the supply is imported chiefly from Great Britain, Germany, Belgium, and Austria. Packing paper is received very largely from Germany, Great Britain, Norway, Sweden, Belgium, and Austria-Hungary. It is stated on reliable authority that a considerable quantity of paper sent to India from England is produced in Sweden and Norway.

Exports of Indian-made paper are negligible.

There are no figures showing the quantity of paper used in this district. The kinds most in use are imitation art paper, supercalendered paper, cheap glazed, white and colored printing, and bank paper. For social correspondence the qualities used are generally good, but commercial houses frequently use a very cheap grade, particularly the native firms.

RAW MATERIAL AVAILABLE.

There appears to be an abundance of raw material available for paper making in India, but it is stated that the cost of freight to the mills is heavy, which will account in large measure for the slow development of the Indian paper industry as compared with the more rapid advance in the imports of foreign-made paper to supply the increasing demand. Sabai grass (a kind of esparto) and jute rejections are used for making paper, and bamboo pulp has been tried experimentally with, it is stated, favorable results, but the prices of locals products, generally speaking, are about 15 per cent higher than imported paper of similar quality. Increasing attention has recently been given to the necessity of obtaining larger supplies of raw material for the manufacture of paper. India is said to require 70,000 tons of paper pulp annually, of which only about 25,000 tons are supplied by the mills in this country. The existence of a local industry depends chiefly on the supply of sabai grass, which, on account of unfavorable seasons, sometimes yields short crops. It is of great importance, therefore, to look for materials affording a constant outturn.

IMPORT TRADE.

As has been stated, the tendency of the import trade is constantly upward. One of the reasons for this is the increasing confidence in native firms, and because many of them have agents in London and elsewhere, through whom they buy paper and other goods. Nearly every large paper merchant in England also has a man on the road in India. These sell to the native firms through a broker, who is responsible for the payment of the bills. British-made papers have, to some extent, been replaced by cheaper German and Norwegian papers of a similar class. Certain watermarks in writing and bank paper have a large vogue, and these have held their own against cheaper paper, owing to their being so well known.

The imports of paper into India from all countries for the five fiscal years ending March 31, 1913, are given in the following table:

Articles and countries.	1908-9	1909-10	1910-11	1911-12	1912-13	Total.
PRINTING PAPER						
United Kingdom	$578,919	$665.907	$656.651	$709,380	$810,000	$3,420,857
Ceylon	58	....	350	....	....	408
Straits Settlements (including Labuan)	....	504	921	....	10	1,528
Russia	....	....	627	....	....	627
Northern Russia	....	....	....	1,645	1.056	2,701
Sweden	41,854	26,211	55,687	68,759	86,760	270,271
Norway	40,080	46,475	40,621	70,924	96,992	294,092
Denmark	....	1,163	....	....	....	1,163
Germany	183.788	177,768	216,165	225,577	222,228	1,025,526
Netherlands	759	5.036	9.582	15.329	19.222	49.928
Belgium	47,409	30,299	24,025	23,529	24,357	149.619
France	2,492	....	....	700	156	3,348
Spain	131	263	....	92	150	636
Italy	2,102	2,633	2,087	1,013	1,698	10.433
Austria-Hungary	105,204	117,900	146.813	138.349	142,102	650,368
United States	1,440	2,973	4,321	....	....	8.734
Atlantic coast	....	....	....	4,944	3.285	8,229
Other foreign countries	287	....	122	394	375	1,178
Total	1,004.523	1.077,222	1.157,975	1.261.535	1.407.391	5.908.646
WRITING PAPER AND ENVELOPS.						
United Kingdom	562,275	566.723	729,352	613,875	721,614	3,193,839
Ceylon	29	68	667	19	161	944
Straits Settlements (including Labuan)	1,046	209	268	175	350	2,048
Hong Kong	370	579	569	302	701	2,521
Other British possessions	....	83	53	....	....	136
Sweden	1,333	4,954	2,711	7.563	3,226	19,787
Norway	827	2.180	4.898	1.484	5.952	15,251
Germany	46,280	58,351	91.300	89,150	86.614	371.698
Netherlands	1.397	603	1.197	8.103	19,227	30,527
Belgium	54.656	52.787	60,967	59,454	74,214	302.078
France	555	676	608	122	603	2.564
Spain	1.163	....	....	156	851	2,170
Italy	13,466	18.152	30,050	16,784	16.308	94,760
Austria-Hungary	84.697	118,640	141,104	110.460	150.365	605,266
China (exclusive of Hong Kong and Macao)	214	88	219	2,175	102	2,798
Japan	2,195	667	954	1,290	817	5,913
United States	2,389	3,319	7,475	....	....	13.183
Atlantic coast	....	....	....	8,706	11,183	19,889
Other foreign countries	345	375	307	443	34	1,504
Total	773.237	828.457	1,072.609	920,251	1,092,322	4.686.876

Articles and countries.	1908-9	1909-10	1910-11	1911-12	1912-13	Total.
PASTEBOARD, MILLBOARD, AND CARDBOARD OF ALL KINDS.						
United Kingdom	$84,876	$78,482	$67,075	$90,809	$77,183	$398,425
New South Wales	....	....	....	....	2,662	2,662
Other British possessions	24	....	29	15	....	68
Russia	....	725	1,012	....	....	1,737
Northern Russia	....	....	....	97	....	97
Sweden	2,097	255	2,185	920	1,251	7,008
Norway	881	462	477	1,212	1,572	4,604
Germany	28,089	31,540	47,643	56,456	59,182	222,910
Netherlands	23,763	44,738	56,670	46,442	57,376	228,989
Belgium	535	6,691	1,723	2,881	3,251	15,081
France	696	....	39	180	822	1,737
Italy	107	842	905	292	117	2,263
Austria-Hungary	886	1,207	1,538	1,786	2,107	7,524
Japan	788	29	97	253	6,108	7,275
United States	1,630	1,650	1,728	....	....	5,008
Atlantic coast	....	....	....	3,883	4,857	8,740
Other foreign countries	....	....	472	355	....	827
Total	144,372	166,621	181,593	205,581	216,488	924,955
OTHER KINDS OF PAPER (INCLUDING PAPER MANUFACTURES).						
United Kingdom	643,127	655,518	691,101	766,391	1,048,765	3,804,902
Aden and dependencies	1,655	380	34	53	73	2,195
Ceylon	2,039	229	438	423	866	3,995
Straits Settlements (including Labuan)	13,694	6,015	5,519	4,141	4,506	33,875
Hongkong	8,020	10,647	7,003	8,823	10,794	45,287
Other British possessions	....	54	423	126	487	1,090
Russia	....	1,076	10,920	....	....	11,996
Northern Russia	....	....	....	17,456	1,430	18,886
Sweden	20,658	40,621	34,270	85,076	31,452	212,077
Norway	32,994	42,538	41,190	44,081	19,714	180,517
Germany	200,636	281,186	277,580	296,107	317,758	1,373,267
Netherlands	3,942	7,864	7,241	4,833	7,217	31,097
Belgium	53,950	59,984	65,104	62,009	64,325	305,372
France	306	560	993	2,092	3,908	7,859
Spain	....	....	....	389	....	389
Switzerland	195	253	413	1,134	204	2,199
Italy	2,443	1,732	2,292	2,667	5,937	15,071
Austria-Hungary	54,656	56,120	59,761	71,440	60,617	302,594
China (exclusive of Hongkong and Macao)	29,598	31,491	28,425	29,408	28,138	147,060
Japan	2,054	1,820	3,071	2,788	16,234	25,967
United States	13,242	16,132	17,582	....	....	46,956
Atlantic coast	....	....	....	23,607	34,178	57,785
Pacific coast	....	....	....	....	262	262
Other foreign countries	88	423	....	204	229	944
Total	1,083,297	1,214,643	1,253,360	1,423,248	1,657,094	6,631,642

Imports of packing paper, by quantities and values, for the fiscal year ending March 31, 1913, were as follows:

Countries.	Quantity.	Value.	Countries.	Quantity.	Value.
	Tons.			*Tons.*	
United Kingdom	844	$67,600	Netherlands	87	$4,638
Hongkong	17	856	Belgium	330	19,889
Other British possessions	2	107	Switzerland	4	642
Northern Russia	279	13,427	Austria-Hungary	306	16,997
Sweden	555	31,851	Other foreign countries	6	871
Norway	908	46,577			
Germany	2,112	114,402	Total	5,450	317,857

Shipping facilities from English and Continental ports are good and plentiful. From Continental ports they are slower as a rule. From the United States experience has shown that they are very slow, owing probably to transshipment. The Hansa Line, however, has direct sailings from New York to Calcutta.

TERMS OF SALE.

Prices are usually quoted either f. o. b. at port of shipment or c. i. f. Calcutta. Terms vary from 30 to 90 days. Firms having agents in London usually pay at 30 days in London. Native firms ask for 60 to 90 days' credit and pay through an Indian bank on production of documents.

All papers pay an ad valorem duty of 5 per cent.

The question of the more general sale of American-made paper is purely one of price, quality, and, to a large extent, the method used to increase sales. The example set by the English mills in having traveling representatives throughout India accounts, to a large extent, for the fact that England leads other countries in her exports hence. There appears to be no local prejudice against American-made paper, but an impression prevails that, from its method of manufacture and quality of material used, it is, as a rule, too expensive for the Eastern market. With a large and increasing market here for imported papers, it is the opinion of this office that our manufacturers would be justified in placing traveling representatives here with full lines of samples of the kinds of paper more largely used. Experience shows this to be the best method.

KARACHI.

From Consul Stuart K. Lupton.

Almost all the paper used in the consular district of Karachi must be imported, and owing to the fact that the importing merchants and the users are almost wholly British it naturally follows that the greater portion of the imports are from Great Britain. German commercial men are active in this line, however, and the German trade is increasing. Efforts have been made to introduce American papers in recent years and there is a good opportunity of getting this trade, as users tell me that in quality and price it can not be approached by English and Continental manufacturers. The great drawback is the length of the time it takes to receive the goods. The ordinary shipment from the United States is received about five months after the mailing of an order, while British manufacturers can deliver orders in two months.

Owing to the spread of education, the demand for writing papers has increased greatly in the last two years and there is reason to believe that this increase will go on in almost geometrical progression. One of the printers here informs me that the number of natives having their own letterheads printed at his shop in 1913 was about twice that of 1912.

Generally speaking, the paper handled in Karachi is of the lowest possible grade. In many of the offices writing paper is used which seems nothing more than a partially sized newspaper. This is landed at Karachi for about 4 cents per pound. Note and letter paper is handled by many shops in small quantities, but this, again, is of a very inferior grade. When a better grade is wanted it is almost always ordered by the user from a stationer in Bombay or Calcutta.

Bond papers are used only in the manufacture of blank books and are imported direct by the binders as occasion arises. Of the ordinary linen paper little is used, while India or Bible paper seems to be unknown in the market. The wrapping paper generally used seems to be of a poor quality of straw stock, no manila being imported. No wall paper is used. At the present time I know of only two rooms in Karachi that are papered.

Writing papers are imported flat in the following sizes, which seem to be most in demand: 20 by 35, 26 by 17, and 26 by 40 inches. The better qualities are imported already cut, and the following retail prices have been quoted:

Typewriter paper, 8 by 10½ and 8 by 13 inches, sells at the following prices per ream for the two sizes, respectively: Manifold, $0.60 and $0.80; thin laid, $0.92 and $1.30; thin wove, $1.35 and $1.83; thick wove, $1.74 and $2.32.

Foolscap, 8 by 12¾ inches, per ream: Thick laid, $1.37; handmade, $7.46.

Note paper, folded, 4½ by 7 inches: Thin cream laid, $0.37; Silurian gray, $0.32; thin linen, $1.01; vellum, $1.75 per ream. In sizes 3⅞ by 6 inches the price of Silurian gray is $0.28; thin linen, $0.67; vellum, $1.32.

Envelopes for these papers sell per thousand for about twice the price of the paper per ream.

The making of paper from hemp fiber was at one time a flourishing trade in this district, but the imported article is better and cheaper, and as a consequence the manufacture has almost entirely ceased. Small quantities are still made in a few villages in the Punjab, but this is used locally.

IMPORT TRADE.

The following table gives the imports of paper of all classes into this port during the fiscal year ended March 31, 1913, and the last nine months of 1913, by classes and principal countries of origin:

Classes and countries.	1912-13	1913, 9 months.
WRITING PAPER AND ENVELOPES.		
Austria-Hungary	$5,894	$4,635
Belgium	2,163	2,157
France		27
Germany	4,424	2,711
Netherlands	2,853	4,442
Italy	73	103
Japan		1
Sweden	378	1,038
Switzerland		71
United Kingdom	64,840	66,920
United States	144	156
Other countries	209	
Total	80,978	82,261
PRINTING PAPER.		
Austria-Hungary	959	2,656
Belgium	571	2,834
Denmark		504
Germany	10,085	11,720
Netherlands	772	2,866
Norway	4,208	11,777
Russia		591
Sweden	11,866	11,689
Switzerland		213
United Kingdom	28,216	30,716
United States	1,309	381
Total	57,986	75,947
PACKING PAPER.		
Austria-Hungary	465	16
Belgium		632
Germany	2,452	1,196
Netherlands		227
Norway		556
Russia		334
PACKING PAPER—continued.		
Sweden	$2,290	$814
Switzerland		129
United Kingdom	914	1,749
Other countries	637	
Total	6,758	5,653
OTHER KINDS OF PAPER.		
Austria-Hungary	2,730	1,166
Belgium	533	1,505
France	251	252
Germany	7,825	3,210
Greece		58
Netherlands		102
Italy	770	86
Japan		15
Norway	414	838
Sweden	3,073	2,965
Switzerland		90
United Kingdom	103,481	69,878
United States	5,037	587
Other countries	252	
Total	124,366	80,752
PASTEBOARD, MILLBOARD, AND CARDBOARD.		
Austria-Hungary	1,019	248
Germany	5,253	3,062
United Kingdom	2,960	1,585
Netherlands	3,068	4,127
Sweden	158	95
Other countries	584	
Total	13,032	9,117
Grand total	283,120	253,730

The ordinary terms given importers by British and Continental mills are 75 days' draft on shipment. In some cases this is extended to 90 days.

The greater number of firms importing papers here have a limited capital and can not carry large stocks. As a result, they are often compelled to order hurriedly and can not wait for American papers to be delivered. The net result is that orders go to European mills. I am convinced that an American house establishing a depot in Bombay or Calcutta and carrying an adequate stock would very soon monopolize the trade of northwest India.

MADRAS.

From Consul José de Olivares.

The general paper trade of the Madras Presidency represents an important feature of the commerce of southern India. The business is to a large extent controlled by the United Kingdom, after which, in the order of their relative importance as sources of supply, come Germany, Austria-Hungary, the Netherlands, Belgium, Sweden, Norway, Japan, the United States, and northern Russia. The possibilities of large sales of American paper manufactures in this consular district are small on account of their inability, in a majority of lines, to compete in prices with foreign products. Local importers also complain that something in connection with the materials used in the manufacture of American book papers renders them much heavier than similar foreign manufactures, with the result that they run fewer sheets to the pound. If this objection could be overcome and the weight of American papers were made to correspond to those largely handled in this country, and satisfactory prices quoted, sales would undoubtedly increase very materially.

The various kinds of paper most in demand in this market are as follows:

MARKET REQUIREMENTS.

Writing paper.—Foolscap, unruled and folded, chiefly of British manufacture but also supplied from the Netherlands and Austria-Hungary; used largely in the manufacture of account books. The actual consumption can not be computed, but thousands of bales of this kind of paper are annually imported into southern India. The more salable grades of foolscap are of fair quality, weight 10 to 16 pounds, glazed finish, size 13½ by 17 inches, c. i. f. Madras price 60¾ to 97⅓ cents per ream.

Bond writing paper is used in this district only to a comparatively limited extent, and the share of the United States in the local paper trade is almost confined to this line. English bond papers are more largely imported, but they do not compare favorably with the American product. These papers are plain and linen finished and vary in size from 17 by 22 to 22 by 34 inches and in weight from 20 to 48 pounds per 500 sheets. The colors in demand are white, azure, opaline, pink, primrose, buff, and golden rod. C. i. f. Madras prices for the more salable lines range from 8½ to 9½ cents per pound, although a higher grade parchment-finish bond is quoted as high as 21 cents per pound.

The demand for typewriter papers, while comparatively moderate, is steadily increasing. The preponderance, representing cheaper cotton and linen finish grades, is of British importation, a limited quantity, mostly confined to superior linen qualities, being of American manufacture. Typewriter papers are chiefly imported into Madras by retailers, who are averse to quoting the wholesale or cost prices. The following range of sizes and retail prices covers the most representative lines of British and American typewriter papers in this market: British—Quarto, 10 by 8 inches, per 480 sheets, $0.40½ to $1.46; cap, 13 by 8 inches, per 480 sheets, $0.56¾ to $1.78½; American—Quarto, 8½ by 11 inches, per 500 sheets, $0.52¾ to $2.68; cap, 8 by 13 inches, per 500 sheets, $0.56¾ to $2.84; brief, 13 by 16 inches, per 500 sheets, $1.13½ to $5.67¾.

Writing paper and envelopes for social correspondence, weddings, etc., have a large sale and are imported chiefly from the United Kingdom, Germany, Austria-Hungary, and Belgium. Qualities include high, medium, and low grade, the larger demand being for the medium. Sizes, tints, weights, textures, and prices have a wide range, as partially illustrated by the accompanying samples. Moreover, the standards of this class of writing paper are frequently influenced by the introduction of new styles, ideas, fads, etc.

Book papers.—The demand for book papers in southern India is large and centers mostly in the cheaper and medium grades of calendered and mill-finish papers. Supercalendered papers are imported to a lesser extent. These papers are supplied by various European countries, but are principally of German and British manufacture. There is a market for both white and colored book papers, the latter coming chiefly in neutral tints. White glazed or calendered book papers range from 16 to 60 pounds in weight, from 17½ by 22½ to 27 by 40 inches in size, and the c. i. f. Madras prices from 2⅞ to 3¾ cents per pound. The most popular colored glazed book paper is the 36-pound weight, sizes 22½ by 35 to 23¼ by 35 inches, and c. i. f. Madras prices 3 to 3¼ cents per pound.

News paper.—There is a large demand in southern India for unglazed printing or news paper, both in white and in colors, the principal sources of supply being Germany, Scandinavia, and Austria-Hungary. Sizes and weights range about as follows: 17½ by 22½ inches, 9 to 18 pounds; 27 by 40 inches, 30 to 45 pounds. C. i. f. Madras prices average, for white unglazed paper about 2⅝ cents and for colored about 2¾ cents per pound.

Wrapping paper.—For wrapping purposes the cheapest and most inferior brown papers procurable are generally used. These are to some extent imported from the Netherlands, Germany, and Scandinavia, but a considerable amount is also produced in India. Of the latter, envelopes are extensively manufactured for the use of the various governmental services in India. However, wrapping papers such as are employed in this country are unlikely to interest American manufacturers, as there is no possible market here for American products of this character, for which reason prices and other details are omitted. Wall paper is seldom used here.

Blotting paper.—There is a good market throughout southern India for blotting papers of both American and European manufacture. The qualities used are linen faced and plain, the prevailing colors being white, cream, red, and blue. The sheets are 22½ by 17½ inches in size, and prices, wholesale in one instance, and retail in others, according as it has been possible to secure quotations, are as follows: American, commercial blotting, "Absorbit," 7 cents per pound c. i. f. c. i. less 2½ per cent; British, social blotting, retail $6 to $17.84½ per ream.

Carbon paper.—The divers uses to which carbon papers are put results in a large demand in the Madras Presidency for that commodity, especially for superior grades of typewriting carbon papers. The sources of supply are the United States, England, and continental countries. Various colors are used, the most popular being black, purple, and blue. Both foolscap and quarto size are in demand. Following are the wholesale and retail prices of some of the more salable makes now on this market:

United States: "Paragon," foolscap, c. i. f. Madras, $2.63½ per 100 sheets; retail, $2.92; "Red Seal," foolscap, c. i. f. Madras, $2.04¾ per 100 sheets; retail, $2.27.

British: "Ellams," foolscap, c. i. f. Madras, $2.19 per 100 sheets; retail, $2.43; "Roneo," foolscap, c. i. f. Madras, $2.59½ per 100 sheets; retail, $3.40; "Britannia," foolscap, retail, $1.13½; "Gestetner's," foolscap, retail, $2.59½; "Gestetner's," quarto, retail, $2.43 per 100 sheets.

European: Two-sided, thick foolscap, retail, $1.46 per 480 sheets; one-sided, thin foolscap, retail, $1.46 per 480 sheets.

Tissue, parchment, wax, and cloth-lined papers.—Considerable quantities of tissue paper in white and colors are imported, the white being most largely used by merchants, stationers, and printers for packing purposes and the colored for decorating. It is chiefly of British and continental manufacture; size of sheets 20 by 30 inches, popular weight 7 pounds, and the average c. i. f. Madras price 43¾ cents per ream.

Parchment and bank papers find a relatively small market in this country and generally are of Italian importation.

Wax papers are supplied from England but are not largely in demand. The latter are stocked by local stationers in white and colors, sizes from 18 by 22 inches to 20 by 30 inches, the retail prices ranging from 10 to 24 cents per quire.

Cloth-lined papers are employed to a limited extent in the local manufacture of envelopes for foreign correspondence, the material, in some instances, being prepared at great expense by the printing establishments by which the envelopes are made, while a limited quantity is imported from England. A superior quality of cloth-lined envelope material is prepared by a local printing house from "Imperial" cover paper, size 22 by 30 inches, weight 60 pounds, at an actual cost of $16.87 per ream. Patent yellow cloth-lined oil paper, for envelopes, size 75 by 40 inches, is imported here from England at $1.30 per roll.

Cover paper.—A very large assortment of cover papers figure in the trade, the preponderance being supplied by Great Britain. The higher prices quoted for American cover papers appear, up to the present time, to have prevented their introduction into this market. Cover papers of all qualities, textures, and tints are in demand, the most salable sizes, weights, and prices ranging as follows: Sizes from 17½ by 22 to 22½ by 35 inches, weights from 23 to 80 pounds, and c. i. f. Madras prices from $1.46 to $4.62½ per ream.

Boards.—Various kinds of boards are in good demand in this market. Strawboards for the most part come from the Continent and Japan. Sizes of sheets are from 22 by 28 to 25 by 30 inches, weights from ½ to 3 pounds, and c. i. f. prices from $32.85 to $35.47 per ton of 2,240 pounds.

Boxboards are imported chiefly from England and the Continent, and, to a small extent, from the United States. Size of sheets is 30 by 25 inches, 4 to 5 sheet thickness, twin and one sided, and average c. i. f. Madras price $3.57 per hundredweight of 112 pounds.

Bristol board is likewise imported from England, the Continent, and the United States. The American product is held in good favor here and the demand is steadily increasing. Sizes of sheets are 20 by 25 and 22 by 28 inches, weight 26 to 66 pounds for 144 sheets, and c. i. f. c. i. prices 4 and 5 cents per pound less 2½ per cent.

HOME PRODUCTION.

There are no paper or pulp mills of any importance in southern India. In the Native State of Travancore there are two small single-machine mills which turn out a crude brown country paper used for packing and kindred purposes. The output, however, is insignificant and uncertain, and the products have no effect whatsoever on the paper business of southern India. The pulp used is made by the natives from bamboo. No reliable statistics exist or are obtainable concerning the working of these mills, which are operated under the most primitive conditions. No paper of any kind is exported from southern India to foreign countries.

Imports of paper, pasteboard, millboard, and cardboard into the Madras Presidency during the calendar year 1913 are given in the following table:

Countries.	Packing paper.		Printing paper.		Writing paper and envelopes (value).
	Pounds.	Value.	Pounds.	Value.	
Austria-Hungary	6,720	$243	743,232	$27,735	$12,698
Belgium	18,256	542	41,552	1,492	10,631
Ceylon	1,456	48			94
France					4
Germany	720,048	18,301	1,133,328	37,680	12,300
Italy	1,792	180	3,024	232	472
Japan					28
Maldives			336	11	
Netherlands	63,504	1,867	74,480	2,690	3,856
Northern Russia	65,632	1,605	17,808	493	
Norway			242,816	7,463	363
Spain					261
Straits Settlements	560	18	6,832	218	26
Sweden	23,632	565	329,840	9,456	454
Switzerland	39,536	876			
United Kingdom	560,448	15,965	5,002,928	226,122	217,242
United States					1,085
Total	1,501,584	40,210	7,596,176	313,592	259,514

Countries.	Other kinds of paper.		Pasteboard, etc.		Total value.
	Pounds.	Value.	Pounds.	Value.	
Austria-Hungary	63,168	$4,301			$44,977
Belgium	113,232	6,760	31,360	$607	20,032
Ceylon	4,032	238	28	4	384
Denmark			6,720	136	136
France	2,464	263			267
Germany	516,432	22,999	305,424	7,006	98,286
Italy	1,792	259	448	29	1,172
Japan	36	18	210,000	3,728	3,774
Maldives			112	3	14
Netherlands	41,664	1,521	1,010,688	18,365	28,299
Northern Russia			10,080	224	2,322
Norway	87,472	2,481			10,307
Spain					261
Straits Settlements	3,584	227	11,200	195	684
Sweden	53,760	2,025	7,168	282	12,782
Switzerland					876
United Kingdom	5,658,240	114,045	621,712	23,750	597,124
United States	5,936	673	20,832	884	2,642
Total	6,551,812	155,810	2,235,772	55,213	824,339

It will be seen from the foregoing table that of a total value of paper imports amounting to $824,339, the share of the United Kingdom was $597,124. The latter's control of the paper trade of southern India embraced all lines with the exception of packing paper, the largest share of which trade, amounting to $18,301, fell to Germany.

In an aggregate of 18 countries competing in the paper trade of the Presidency, the United States held ninth rank with a total exportation amounting to $2,642. This in turn covered three lines of paper imports, in the following rank and proportion: Writing paper, sixth largest importation, valued at $1,085; other kinds, chiefly blotting and carbon papers, rank seventh in importation, amounting to $673; and boards, principally boxboard and Bristol board, fifth in order of importation, value $884.

It is evident from the foregoing figures and comparisons that the present market for American paper in southern India is not of relatively large importance. Nevertheless, the general local market for paper is large and American paper products, while limited in importation, are held in good favor, and the chief requisite for the expansion of American trade in this commodity is for our manufacturers to meet the prices of their foreign competitors in this field.

The trend of the paper import trade has always been in favor of the United Kingdom, and occasional deflections of portions of that trade toward other countries are accounted for entirely by competition in prices and characteristics of the products involved.

INDIAN MERCHANDISE MARKS ACT.

The attention of American exporters who may contemplate entering the paper market of this country is invited to the "Indian merchandise marks act," of which the following provisions have an important bearing upon paper imports the origin of which is not the United Kingdom or British India:

> The name or trade-mark must be accompanied by a definite indication of the goods having been made or produced in a place beyond the limits of the United Kingdom or British India; the country in which that place is situated must, in that indication be indicated in letters as large and conspicuous as any letter in the name and trade-mark, and in the same language and character as the name and trade-mark.
>
> Where, therefore, goods made elsewhere than in the United Kingdom or British India bear the name or trade-mark, being or purporting to be the name or trade-mark of a manufacturer, dealer, or trader in the United Kingdom or British India, the counter indication must distinctly specify the country of origin or manufacture. In such cases the form "Made in ——" must be used; other expressions, such as "Made abroad," "Not made in the United Kingdom or British India," "Foreign make," "Foreign produce," are not permissible.
>
> In cases where an indication of origin is required, the general rule is that the indication must be shown in letters as large and conspicuous as any letter in the name, trade-mark, or false description; it must be in the same language and character, and it must accompany every application of the name, trade-mark, or false description.
>
> The size of the letters need not be rigidly insisted upon, provided that they are sufficiently conspicuous to catch the eye along with the name or trade-mark.
>
> The counter indication should be adjacent on the same label, or part of the covering or goods, as the case may be, to which the name, trade-mark, or false trade description is applied; it should not be on a separate label, nor otherwise detachable from the application of the name, trade-mark, or false trade description itself; and it should be applied no less indelibly than the latter. It should be repeated for all applications of the name, trade-mark, or false trade description except when the latter are reproduced in such close proximity that one prominent counter indication will suffice to cover all; and if different languages or characters, English or Indian, are used for the names or included in the trade-marks, the counter indication should be repeated in each language employed.

As a result of the foregoing provisions, it is required that every sheet of American watermarked paper designed for export to India must bear, in connection with the said watermark, the name of the country of origin, as, for example, "Made in the United States" or "Made in U. S. A."

There is a strong disposition on the part of British paper manufacturers and their agents in southern India to use their influence, through chambers of commerce and kindred trade organizations, with the Government of India with a view to insuring the strictest possible enforcement of the provisions of the Indian merchandise marks act as relating to paper imports from non-British countries, as witnessed by their manifestations of disapproval at the recent action on the part of the central Government in modifying the requirements of the act, which resulted in the prompt restoration of the original strict interpretations as to the provisions referred to.

Until recently shipping facilities constituted a strong factor in favor of imports from the United Kingdom and the Continent as against those from the United States for the reason that the latter were subject to the disadvantages of compulsory transshipments. This serious obstacle, however, has been removed by the establishment of a direct steamer service between New York and Madras, with regular sailings on the 15th and last day of every month.

At least two leading American paper manufacturers have strong confidence in the opportunities afforded by southern India as a coming market for their products, as demonstrated by their commendable enterprise in sending traveling sales representatives here, quite as much for the purpose of paving the way to future trade development as for any immediate results obtainable.

The methods of quoting prices in this market are as follows: Cost, insurance, and freight (c. i. f.); cost, insurance, freight, and commission (c. i. f. and c.); and cost, insurance, freight, commission, and interest (c. i. f. c. i.).

Terms quoted are usually 30 or 60 days draft through local bank, documents on acceptance to preferred customers, otherwise documents on payment. Long time credits are unusual in this field, as reliable and substantial houses prefer to do business on practically a cash basis, with a view of benefiting from any discounts thereby obtainable.

OFFICIAL ENVELOPES.

Envelopes for official correspondence and general mailing matter used in the various governmental departments of the Madras Presidency are of sizes, styles, and quality quite different from the standard envelopes used for kindred purposes in the United States. The average envelope for official matter in this country is of more than sufficient size to accommodate a sheet of legal-cap paper folded once, lengthwise, through the center. The material from which such envelopes are manufactured is generally rough, unfinished manila paper, such as is commonly used for wrapping purposes. The colors employed are usually white, unbleached, and brown, In some instances, such as in very select official correspondence, white envelopes of fine quality are used. Practically all official envelopes in use hereabouts are manufactured by the Government press department at this place.

BAGS.

Bags are employed only by the better retail stores and shops in this district, for wrapping such merchandise as groceries, millinery, fancy goods, furnishing goods, notions, etc. They are of light-weight unbleached paper of both rough and smooth texture frequently bearing the imprint of advertising matter, and are manufactured by local printing and binding establishments and in some instances by the firms using them. Bags are seldom used in the bazaars for wrapping goods of any sort and are never employed by native fruit venders or greengrocers.

FOLDING BOXES.

Small folding boxes are used in this district chiefly by grocers and confectioners. They are generally manufactured from light-weight pasteboard of inferior quality and bear the advertisements of the firms using them. Such boxes are, like bags, manufactured locally both by printing and binding concerns and by the establishments employing them. Ornamented pasteboard boxes of superior quality and workmanship are used locally to a limited extent by confectioners for fine chocolates and bonbons and are chiefly imported from European countries.

RANGOON.

From Consul M. K. Moorhead.

Two-thirds of the paper imported into Burma comes from the United Kingdom. The average annual imports are valued, in round numbers, at $600,000, of which $400,000 worth comes from the United Kingdom and only $5,000 worth from the United States. American paper is of too high a quality and price for this market. The English and Continental paper sold is of very poor and inferior quality. American paper, on account of its superior quality, could be sold in greater quantities if the manufacturers would add to the watermark the words "Made in U. S. A." Unless these words are included in the watermark, importation is forbidden by the Government. This requirement no doubt prevents the natural expansion of American paper trade in India.

It is impossible to state even approximately the total amount of each kind of paper used in Burma. The statistics of imports given below, however, approximates fairly closely the actual yearly consumption, as practically no paper is manufactured within the Province.

There are no special sizes or requirements, except as to watermark, in demand, the English standard sizes being almost solely used. Writing paper for the use of the European community and educated natives is mostly of medium grade English make. A very low-grade writing paper is imported from the Continent of Europe for the use of natives. Bond and ledger paper also come from England. Small quantities of superior ledger paper are imported from the United States. Book papers are all of English or German origin; news paper from the Continent of Europe. Wrapping paper is practically all bogus manila imported from England or Scandinavia. No wall paper is used, and very little kraft. Tissue paper comes mostly from Europe; blotting and cover paper from England, Germany, and Italy. Very little, if any, cloth-lined, parchment, and wax paper is used. Carbon papers are of English and American manufacture. Strawboards and Bristol boards are brought from England and the Netherlands. Almost no box board and pressboards are imported.

HOME PRODUCTION.

The only paper manufactured in Burma is a very rough paper made in the Northern Shan States. The manufacture is carried on in many parts of all the States, but the principal places of production are probably the Namhkam and Nawngmawn circles of north Hsenwi. Nowhere is there manufacture on a large scale. It is carried on by the women of the household as a subsidiary source of income.

There are three kinds of trees the bark of which is used. The Shan names are hsa soi, hsa kii, and hsa mak mun. These are all probably forms of the *Broussonetia papyrifera*. The best white Shan paper is made from the first two; the third tree is said to give a rather yellowish paper.

Bark is taken off the trees when all leaves have fallen off, being generally collected by a different person to the paper manufacturer. The bark is placed near a fire and then exposed to the sun for two days to enable the fiber to be separated. After the fiber has been separated it is boiled in a caldron of water. To every viss (3.6 pounds) of fiber a small basket (the local pyi) of wood ashes is added. The nucleus is boiled for a whole day, or until it has formed a mash or pulp. The pulp is then washed in clean cold water and beaten with sticks until it assumes a liquid form. It is then spread evenly over a tray made of muslin cloth fixed on a frame of wood. A plate is then rubbed over the surface to smooth it down. The frame is then exposed to the sun until it is dried, when the paper is peeled off. The bark is produced in March and April and fetches about 2 annas (4 cents) a viss in most bazaars. The best paper is sold by sheets, the ordinary price being about 2 rupees ($0.65) per 100 sheets.

One viss of fiber is said to yield about 40 sheets of paper. The thickness of the paper depends on the amount spread on the frame. There is therefore no expensive plant of any kind used; an ordinary caldron, a wooden frame with a sheet of muslin spread tightly over it, a stick for beating the fiber, and a plate for smoothing the paper pulp on the frame being all the implements used.

There are no statistics of the value and quantity of the paper manufactured yearly. The inland trades report for 1912–13 rates the value of paper imported into Burma from the Shan States at 7,554 rupees ($2,450.74), but this includes a quantity of colored Chinese papers, of which a certain amount comes through from China. It is believed that most of the Shan paper imported to Burma is used for decorating pyatthat and the like for festivals and funerals. This paper sells in the Rangoon bazaar for 2 cents a sheet.

Imports of paper into Burma for the 10 fiscal years 1904 to 1913 are given in the following table:

Years ended March 31.	From foreign countries.	From India.	From United States.	Total.
1904	$125,220	$16,740	....	$141,960
1905	187,520	12,570	....	200,090
1906	226,430	10,150	....	236,580
1907	249,870	7,600	$3,000	257,470
1908	296,690	8,930	2,680	305,620
1909	370,400	12,140	4,520	382,540
1910	380,260	13,500	3,900	393,760
1911	410,830	21,560	5,610	432,390
1912	388,150	32,640	4,880	410,790
1913	534,690	53,930	5,730	588,620

During the past 10 years the imports of paper into Burma have shown a steady increase, the total value imported in 1904 being $141,960, as against $588,620 in 1913. The United Kingdom during the whole period has supplied the greater share. Paper manufactured in India is now used in Burma in greater quantities, the imports having increased from $16,740 in 1904 to $53,930. Most of this consisted of printing paper imported by the Government for the use of the Government printing press. In 1904 no paper was imported from the United States, while in 1913 the imports were valued at $5,730, which is an insignificant share of the total trade. As already explained, the requirements of the Indian merchandise marks acts in regard to watermark and the superior quality and high price of American paper has prevented any great extension of trade from the United States.

CEYLON.

From Consul Henry D. Baker, on special service.

Inquiry among the various newspaper publishers in Ceylon as to whether or not any American news printing paper or printing machinery is used shows that practically all the printing paper is imported from England, Sweden, and Austria, and most of the printing machinery from England. There is only one publication which makes use of much modern machinery, such as linotypes, most of the work being done by manual labor, which is so cheap as to remove in great measure the incentive for labor-saving machinery.

The Ceylon Times, of Colombo, which has the best-equipped newspaper plant in Ceylon, reports:

> We have four linotypes, one Miehle machine, one Centinette purchased from the Linotype company, and we also have a folding machine made by the Canadian-American Machinery Co. (Ltd.). Our paper we obtain from England. Other machinery includes a newspaper double feeder (Bremner's Wharfedale), a number of jobbing machines, type casting, platens, ruling, etc.

The Ceylon Independent, of Colombo, reports:

> Our printing paper is manufactured in Sweden, but is purchased by us through one of the leading English houses, and we pay 1¼d. (2½ cents) per pound c. i. f. Our machinery is of English make and purchased through a well-known house.

The Ceylon Observer, of Colombo (also publishing the Tropical Agriculturist), reports:

We at present obtain our printing paper from England and Austria, that for our daily paper being bought from Austria at slightly over 1½d. (3 cents) per pound. Machinery comes almost entirely from England. Paper or machinery quotations from America hitherto received by us have been so high on account of the expensive freight that the question of sending orders was quite impossible.

The Sihala Samaya, of Colombo (published twice a week in the Cingalese language) reports:

We buy paper from Sweden through London, and pay 1¼d. (2½ cents) per pound, less 7½ per cent discount.

There are two other newspapers published daily in Colombo, the Ceylon Leader and the Cingalese, which made no response to my inquiry. The Government Printing Works at Colombo, which has the most up-to-date and well-equipped printing establishment in Ceylon, including 12 linotype machines, buys its paper and machinery in England.

The Ceylon newspaper publishing establishments do a fair amount of general job printing, and there are also a few private establishments which make a specialty of this class of work.

JAPAN.

YOKOHAMA.

From Deputy Consul General Max D. Kirjassoff.

Japan itself produces about 85 per cent of the paper used in the country, the figures for 1911 showing a total production of $19,579,346, with imports for that year amounting to $3,378,745 and exports to $1,162,324. Germany leads in the imports of paper to Japan with a total $1,094,791 for 1913. The United Kingdom is a close second with $1,046,412, Sweden third with $445,730, Belgium fourth with $227,216, Austria-Hungary fifth with $173,133, and the United States sixth with $130,425.

By far the largest item among the imports is "print" paper, of which $1,765,547 worth was imported in 1913. The value of the imitation Japanese paper (simili) and tissue paper imported amounted to $397,690, writing paper to $220,867, packing paper to $343,840, and cardboard and pasteboard to $195,699. Most of the "print" paper is imported from the United Kingdom, Germany, and Belgium, while Austria-Hungary, Germany, and Sweden lead in imports of tissue and "simili" paper, all in the order given. By far the greater part of the packing paper comes from Sweden, whose imports of this commodity were $188,404 in 1913, Germany being the chief importer of cardboard and pasteboard ($100,598), with the United Kingdom leading in the importation of writing and drawing papers.

The Japanese factories making "foreign" paper, manufacture chiefly "news-print" paper, the cheaper print paper, and "simili." Foreign-style paper is being used to a greater extent every year, the demand for the better grade of print paper, writing and drawing paper showing a steady increase. No linen paper whatsoever is manufactured in Japan.

The standard sizes of print paper manufactured in Japan are, with the names by which they are known in the trade here, shirokuban, 2.6 by 3.6 feet; kikuban, 2.6 by 3.1 feet; chikenban, 1.95 by 2.5 feet; sansanban, 2.3 by 3.3 feet. Print paper is imported in reams of 500 sheets. Other foreign papers, such as book, print, drawing and writing, and packing papers do not differ in size from the standard sizes prevailing in the United States.

For ordinary social correspondence Japanese "hankire" is used. This was formerly made by pasting three sheets (2 feet by 7 inches) together and rolling. By a recently patented process a continuous sheet is made called "tsugimenashi-hankire." Much of the business correspondence is carried on in English and for this purpose bond and typewriter papers of ordinary sizes and varying grades of quality are used. Among the Japanese who are taking to foreign writing paper the cheaper grades are most in use. All writing paper, better class book and other print papers, typewriter paper, carbon paper for typewriters, and better class wrapping paper are imported. Most of the paper pulp is imported from Sweden either directly or through Germany, Swedish pulp being cheaper than pulp from the United States and Canada.

Japanese papers are of both hand and machine manufacture. The following are the principal kinds and sizes made: Hanshi, 0.85 by 1.08 feet; shoinshi, 0.93 by 1.33 feet; hankire, 0.60 by 2 feet; nishinouchi, 1.11 by 1.61 feet; tengujo, 0.90 by 1.30 feet.

MATERIALS USED.

The following materials are used in the manufacture of paper in Japan: Mitsumata (*Edgeworthia chryantha*) bark, bark of kozu (*Proussonetia papyrifera*), bark of mulberry tree, rags, straw, waste, papers, pulp, and timber materials consisting of todomatsu (*Abies sachalinensis*), ezomatsu (*Picea ajamensis*), momi (*Abies firma*), and *tsuga* (*Sieboldi*). The prices of these materials, per 100 pounds, are as follows:

Mitsumata bark (on the ground)	$4.20
Mitsumata bark (bleached)	5.10
Kozu bark (white)	6.60
Kozu bark (black)	3.36
Mulberry bark	Uncertain
Waste papers (Japanese)	3.60
Waste papers (foreign)	1.20
Rags	1.20
Straw pulp	3.50
Ground pulp	2.40-2.75
Timber pulp	1.90-2.40
Pure white pulp	2.85-3.50
Soda pulp	2.50-3.00

In the year 1911 there were 55,412 so-called factories of Japanese paper. Much of this paper is handmade and is, to a large extent, manufactured by private individuals on a small scale. The total value of Japanese papers in 1911 was $10,124,492.49, and that of foreign papers manufactured in Japan, $9,454,853.70.

There is a Government paper mill at Oji, where paper money, post cards, postage stamps, etc., are manufactured. Here, too, is manufactured a paper called kyokushi by a secret hand process. This paper is used for money, official (Japanese) correspondence, diplomas, certificates, etc. An imitation kyokushi of very inferior grade and much cheaper is made by some of the paper manufacturers.

Wages at the factories range from about 25 cents to 65 cents, making an average of about 30 cents per day. On Hokkaido Island the wages average about 20 per cent higher than this.

The machinery in use in Japanese paper mills is almost entirely American and British, with the United States in the lead. Minor parts are occasionally of German, Austrian, or Japanese make. German manufacturers have recently entered the market to sell paper-making machinery in Japan.

WHOLESALE PRICES.

The following are the wholesale prices of paper, both domestic and imported:

Imported:	
Print paper, per pound	$0.045 - $0.05
Notebook (chobo) paper, per pound	.06 - .065
White cardboard, per ton	About 55.00
Manila cardboard, per ton	About 100.00
Cardboards for tea, per ton	About 60.00
Writing paper, per pound	.0575- .085
Letter (shokwanshi) paper of 15 pounds weight, per ream of 480 sheets	About 2.85
Imitation Japanese paper of 18 pounds weight, per ream of 500 sheets	.80 - .90
Imitation Japanese paper of 21 to 23 pounds weight, per ream of 500 sheets	.95 - 1.10
Imitation Japanese paper (torinoko), per pound	.05 - .055
Rice paper, per pound	.425 - 1.00
Colored paper (sukiirogami), per ream of 500 sheets	1.00 - 2.50
Domestic paper (Japanese):	
Hanshi, per 100 pounds	16.00 - 22.00
Shoinshi, per 100 quires	5.00 - 6.25
Nishinouchi, per 100 pounds	20.70 - 23.00
Domestic paper (foreign):	
Wrapping paper (zaragami), per 100 pounds	About 3.35
Print paper, per 100 pounds	3.25 - 8.00
Imitation Japanese paper, per 100 pounds	5.50 - 6.00
Paper for match boxes, per ream of 500 sheets	1.05 - 1.55
News print paper, per ream of 500 sheets	About 1.70

Imports of paper from the United States have been decreasing since 1911. Paper importers attribute this decline to the generally high prices of the American products and to the increasing manufacture of foreign papers in Japan. It is a noticeable fact that the United States does not import into Japan match paper, cigarette paper, and very little or no lighter print paper. In general, paper imports to Japan show a decrease yearly for the three years of 1911, 1912, and 1913.

A statement of the imports of paper for this period, by classes and countries, follows:

Classes.	United Kingdom.	Germany.	Belgium.	Austria-Hungary.	Sweden.	United States.	Other countries.
IMPORTS FOR 1911.							
Print paper of not more than 58 grams per square meter....	$49,958	$54,968	$118,336	$36,023	$37,877	$112	$36,023
Other....................	380,961	26,731	288,288	22,242	13,598	115,196	13,769
Writing paper..................	132,562	6,960	3,229	31,592	168	3,389	5,263
Drawing paper..................	36,805	67,713	7,860	35,476	11,399	4,026	15,053
Packing paper..................	7,838	39,236	155	19,110	53,939	600	18,333
Match paper....................	685	59,191	....	12,523	11,384	....	....
Cigarette paper................	....	57	....	762	....	....	217
Card and pasteboard............	24,120	75,005	1,554	....	19,787	14,512	25,686
Chinese paper..................	....	....	....	....	....	....	28,471
Imitation Japanese and tissue paper..........	9,036	49,426	129,902	251,160	148,431	....	57,766
Imitation parchment, paraffin, and wax paper..............	2,659	39,242	2,641	4,629	17	215	2,223
Other..........................	43,407	501,225	17,433	28,869	72,541	24,233	24,948
Total....................	688,031	919,754	569,398	442,386	369,141	162,283	227,752
IMPORTS FOR 1912.							
Print paper of not more than 58 grams per square meter....	90,547	101,423	56,718	16,889	17,853	....	14,546
Other....................	587,058	376,452	123,294	2,886	17,597	60,046	8,085
Writing paper..................	177,386	14,193	2,857	30,925	....	5,614	707
Drawing paper..................	49,050	39,736	1,768	13,811	5,244	277	13,155
Packing paper..................	10,682	56,579	1,346	9,344	123,704	4,496	19,779
Match paper....................	2	53,953	....	9,583	13,339	....	2,207
Cigarette paper................	....	501	....	391	....	....	2
Card and paste board...........	9,522	130,747	5,473	2,151	22,802	32,542	2,589
Chinese paper..................	....	....	....	....	....	....	24,095
Imitation Japanese and tissue paper..........	52,577	180,853	69,243	134,749	92,080	6,277	110,695
Imitation parchment, paraffin, and wax paper..............	16,346	66,479	3,297	1,042	125	477	2,622
Other..........................	30,484	323,408	14,302	14,087	25,879	23,995	9,780
Total....................	1,023,654	1,344,324	278,298	235,858	318,623	133,724	208,262
IMPORTS FOR 1913.							
Print paper of not more than 58 grams per square meter....	103,111	174,182	42,475	27,298	54,671	19	16,895
Other....................	608,116	429,050	156,786	8,961	49,710	85,581	8,692
Writing paper..................	189,543	8,360	410	14,598	122	7,285	549
Drawing paper..................	30,090	1,612	1,770	6,625	925	315	32,008
Packing paper..................	38,156	285	3,933	9,825	188,404	7,263	95,974
Match paper....................	....	39,443	191	1,491	13,865	....	282
Cigarette paper................	....	....	....	444	....	....	....
Card and paste board...........	14,099	100,598	9,154	805	58,216	10,585	2,242
Chinese paper..................	....	....	....	....	....	....	33,578
Imitation Japanese and tissue paper..........	36,490	80,123	5,905	81,788	69,368	18,665	105,351
Imitation parchment, paraffin, and wax paper..............	13,612	77,621	1,550	1,994	5,979	369	3,401
Other..........................	13,195	183,517	5,042	19,304	4,470	343	1,185
Total....................	1,046,412	1,094,791	227,216	173,133	445,730	130,425	300,157

The exports of paper for the years 1911 to 1913, by classes and countries, are as follows:

Classes.	China.	Kwang-tung.	United Kingdom.	United States.	Hong-kong.	France.	Germany.	Other countries.
EXPORTS FOR 1911.								
Foreign printing	$185,640	$37,109	....	....	$503	$408	$275	$1,299
Other	9,642	9,643	....	....	1,586	....	....	589
Ganpi and usuyo	4,347	338	$66,960	$2,305	1,512	5,622	12,766	101,198
Yoshino and tengujo	1,648	140	22,238	....	....	3,290	433	7,871
Torinoko	17,596	548	12,658	....	345	10,696	3,907	19,137
Renshi	123,480	38,965	....	....	81	26	....	637
Toyo	56,222	1,056	....	....	....	....	....	....
Strawboard	17,257	2,678	772	1,113	4,747	....	....	103,907
Hanshi and mino, ruled	854	3,474	....	50	....	....	....	335
Other	5,448	43,077	823	77	1,518	....	200	5,463
Packing	6,178	313	154	4	330	384	344	150
Wall	1,211	7,359	21,626	2,138	24,382	42	2,386	25,615
Toilet	....	....	....	....	....	....	....	....
Other	24,912	38,389	9,236	200	3,477	2,019	3,686	33,190
Total	454,435	183,089	134,467	5,977	38,481	22,487	23,997	299,391
EXPORTS FOR 1912.								
Foreign printing	172,106	36,351	....	....	9,291	....	121	684
Other	19,477	14,977	....	....	1,293	....	....	93
Ganpi and usuyo	11,425	326	65,518	87,478	1,822	6,360	18,306	23,886
Yoshino and tenujo	1,523	201	39,714	27,043	12	3,460	2,014	456
Torinoko	95,526	2,596	5,168	15,889	896	7,229	6,156	2,385
Renshi	199,571	53,406	....	....	....	....	....	526
Toyo	59,688	200	....	....	....	....	....	....
Strawboard	36,640	4,283	....	3,735	6,789	....	....	62,003
Hanshi and mino, ruled	844	2,869	....	4	1	....	....	241
Other	7,445	59,591	304	435	2,533	96	352	6,078
Packing	21,392	1,365	10	590	289	21	124	382
Wall	1,638	3,313	18,014	28,391	5,189	....	1,210	9,781
Toilet	6,055	16,087	....	2,437	1,442	....	....	16,289
Other	37,836	29,783	5,001	3,458	2,567	623	3,361	7,361
Total	671,166	225,348	133,729	169,460	32,124	17,789	31,653	130,165
EXPORTS FOR 1913.								
Foreign printing	186,345	45,172	....	93	14,034	....	487	2,459
Other	13,978	20,106	....	....	1,258	....	....	69
Ganpi and usuyo	10,067	517	59,054	83,188	210	4,008	16,059	27,180
Yoshino and tengujo	2,797	....	38,265	23,708	201	4,444	4,618	399
Torinoko	102,985	3,438	12,817	19,046	2,252	21,457	5,924	5,514
Renshi	158,013	73,521	....	....	1,547	....	....	819
Toyo	69,075	394	....	....	729	....	....	134
Strawboard	38,068	8,704	770	2,792	8,672	28	....	96,515
Hanshi and mino, ruled	938	2,723	113	684	5	....	....	501
Other	9,928	55,229	1,109	773	2,969	316	52	4,884
Packing	10,826	5,375	48	460	4	....	159	771
Wall	1,591	3,125	16,493	53,188	91	266	4,419	6,091
Toilet	7,596	15,616	147	3,059	1,856	....	....	15,207
Other	52,489	24,151	7,156	10,020	1,650	2,668	6,865	7,131
Total	664,696	258,071	135,972	197,011	35,478	33,187	38,583	167,674

KOBE.

From Consul George N. West.

The manufacture of paper has grown very rapidly, and in course of time there will be no need of foreign importation, but in certain classes of paper the importations are likely to increase for some years. This is because the demand is increasing more rapidly than the capacity of the mills to fill it. Though the mills have increased their capital and extended their plant very considerably, yet many of the contemplated extensions have had to be postponed on account of the scarcity of money in this country.

It is impossible to give any estimate of the amount of paper used in this district, as there are so many small mills from which figures can not be obtained. These mostly make toilet paper and cheap wrapping paper.

As regards labor, machine tenders get 50 cents (United States currency) per day, engineers $37.50 to $75 per month, and coolies 20 to 30 cents per day.

The mills are equipped with machines of various makes, English, American, German, and Austrian, while the Japanese are also making cheap machines for some of the smaller mills. The Home beater and Jones beater are mostly used in machines.

IMPORT TRADE.

Such factors as shipping facilities, customs duties, etc., are the same as in Yokohama.

From the following statistics regarding the import trade of papers into Kobe, it will be seen that the largest amount of any one kind imported is printing or book paper. The trade in this increased from $454,438 in 1909 to $624,799 in 1913. United States trade decreased from $22,506 to $9,781, while German trade increased from $53,881 to $184,696, and the United Kingdom from $141,595 to $255,348.

Imports of imitation Japanese paper and tissue paper decreased from $384,983 in 1909 to $228,629 in 1913. The United States exported a small quantity during 1912 and 1913, and Norway and Sweden gained during the five years, while Austria-Hungary decreased from $289,285 to $72,257.

Imports of packing paper increased from $91,116 to $161,110 during this period. The small trade formerly enjoyed by the United States has dropped to practically nothing; Germany has also decreased, while Sweden is the largest gainer, from $27,873 to $118,807.

Imports of pasteboard or cardboard increased from $52,950 in 1909 to $102,082 in 1913, the small share of the United States and Russia dropping to next to nothing. Sweden increased from $423 to $45,409 and Germany from $7,593 to $43,677.

Imports of writing paper increased from $73,467 in 1909 to $94,392 in 1913. The small share of the United States increased slightly, the principal gainer being the United Kingdom, $34,958 to $85,972, while Austria-Hungary lost from $35,081 to $4,780.

Imports of match paper decreased during the five years from $94,662 to $55,493. The losers are Germany, $71,644 to $39,601, and Austria-Hungary, $5,226 to $1,496. The United States does not now share in this trade.

Imports of drawing paper decreased from $89,537 in 1909 to $44,298 in 1913, the principal loser being Austria-Hungary, $66,650 to $2,579. The gainers are the Netherlands from nothing to $15,426, and the United Kingdom from $9,991 to $12,651. The United States again does not share to any appreciable extent.

Imports of imitation parchment paper increased from $11,984 in 1909 to $41,505 in 1913, the gainer being Germany, from $11,796 to $35,248. United States practically nothing.

Imports of blotting paper decreased from $14,018 in 1909 to $8,384 in 1913. This trade was formerly nearly all from the United States, which country has decreased from $13,217 to $6,874 in 1913.

The detailed figures of imports of paper for the period 1909 to 1913, by classes and countries, are as follows:

Classes and countries.	1909	1910	1911	1912	1913
PRINTING PAPER.					
Austria-Hungary	$11,963	$19,230	$26,267	$6,010	$16,390
Belgium	141,849	148,485	144,058	72,347	96,920
Denmark					2,441
France	8,858				
Germany	53,881	73,023	46,378	210,599	184,696
Netherlands	356	1,192	424	3,438	146
Norway	22,408	34,844	3,618	9,482	11,938
Russia		17,000	24,346		
Sweden	51,022	65,325	38,818	17,920	47,139
United Kingdom	141,595	235,091	192,355	441,867	255,348
United States	22,506	21,666	17,973	9,968	9,781
Total	454,438	615,856	494,237	771,631	624,799
IMITATION JAPANESE PAPER AND TISSUE PAPER.					
Austria-Hungary	289,285	252,979	231,165	126,397	72,257
Belgium	40,236	31,761	17,141	971	470
Denmark	2,340			673	8,429
France		1,892	268	6,713	1
Germany	48,175	36,499	17,434	76,125	36,712
Kwantung Province				51	
Netherlands				1,413	
Norway	3,641	26,144	25,524	38,898	40,697
Sweden	425	74,516	74,696	51,133	41,807
United Kingdom	881	211	1,174	21,524	9,614
United States				6,302	18,642
Total	384,983	424,002	367,402	330,200	228,629
PACKING PAPER.					
Austria-Hungary	6,772	10,368	10,845	5,017	4,887
Belgium	162	83			1,680
Denmark	472			990	546
France	1	76	23	8	2
Germany	34,774	32,804	22,180	29,674	22,846
Netherlands		229		578	640
Norway	1,115		6,021	1,980	3,024
Russia	217	4,506	5,940	5,690	1,611
Switzerland	442		13	417	
Sweden	27,873	27,193	36,492	72,844	118,807
United Kingdom	1,349	422	4,945	4,479	7,059
United States	17,939	21	246	16	8
Total	91,116	75,702	86,705	121,693	161,110
CHINESE PAPER.					
Chain	68	280	739	656	208
PASTEBOARD OR CARDBOARD.					
Austria-Hungary	1,159			1,380	212
Belgium		31		3,558	3,680
Denmark					241
France		51			
Germany	7,593	7,425	33,581	47,869	43,677
Netherlands		256	240	820	692
Norway				46	
Russia	23,049	27,812	18,528		
Sweden	423	3,065	19,526	21,353	45,409
United Kingdom	724	1,816	21,019	7,040	8,124
United States	20,002	30,502	7,807	20,948	46
Total	52,950	70,958	100,701	103,014	102,081
WRITING PAPER.					
Austria-Hungary	4,780	22,712	14,500	15,651	35,081
Australia		1			
Belgium	105	2,364		1,910	3,143
France	3	94	2	800	14
Germany	1,705	5,677	942	694	166
Netherlands			459	207	
Spain		232			
Switzerland	130				
Sweden				12	
United Kingdom	85,972	78,816	62,268	50,967	34,958
United States	1,697	269	114	306	105
Total	94,392	110,165	78,285	70,547	73,467

Classes and countries.	1909	1910	1911	1912	1913
MATCH PAPER.					
Austria-Hungary	$1,496	$9,477	$12,573	$14,516	$5,226
Belgium	192	....	687	....	....
Germany	39,601	39,170	58,477	79,662	71,644
Norway	283	1,932	....	1,471	4,030
Netherlands	....	....	....	562	175
Sweden	13,921	10,652	11,430	13,709	13,583
United Kingdom	....	....	687	1,331	....
United States	....	....	....	....	4
Total	55,493	61,231	83,854	111,251	94,662
DRAWING PAPER.					
Austria-Hungary	2,579	7,241	23,753	36,331	66,650
Belgium	1,285	871	369	424	....
France	735	229	2,181	3,867	925
Germany	10,693	24,585	47,547	16,006	10,657
Netherlands	15,426	7,456	4,296	....	....
Norway	....	2,786	5,212	2,357	....
Sweden	929	5,012	9,641	1,710	773
United Kingdom	12,651	18,014	13,992	15,419	9,991
United States	....	278	....	....	541
Total	44,298	66,472	106,991	76,114	89,537
IMITATION PARCHMENT.					
Austria-Hungary	....	....	....	632	....
Belgium	1,218	684	....	....	180
Denmark	125	....	....	....	....
France	....	....	287	189	....
Germany	35,248	30,390	23,575	21,222	11,796
Netherlands	263	....	....	....	....
Norway	452	....	148	....	....
Sweden	2,812	145	....	....	....
United Kingdom	1,386	7,554	1,932	2,805	3
United States	1	1	....	....	5
Total	41,505	38,774	25,942	24,848	11,984
BLOTTING PAPER.					
Belgium	....	452	....	....	....
France	394	391	2	1	279
Germany	529	213	3	....	....
Switzerland	1	1	....	....	....
United Kingdom	586	970	474	871	522
United States	6,874	8,529	7,420	9,121	13,217
Total	8,384	10,556	7,899	9,993	14,018
CIGARETTE PAPER.					
Austria-Hungary	446	....	....	1,299	16,658
Germany	....	....	....	....	92
Philippine Islands	....	2	....	....	....
Total	446	2	....	1,299	16,750
FILTERING PAPER.					
Austria-Hungary	....	79	....	....	....
France	....	191	43	45	309
Germany	1,225	1,925	2,562	892	981
Kwantung Province	12	....	....	....	....
United Kingdom	317	67	24	7	8
United States	334	30	25	....	....
Total	1,888	2,292	2,654	944	1,298
WALL PAPER.					
Belgium	175	....	588	84	....
France	175	44	244	....	....
Germany	535	128	324	972	4
Norway	....	....	520	....	....
United Kingdom	240	90	438	163	555
United States	3	24	17	1	37
Total	1,128	286	2,131	1,220	596

Classes and countries.	1909	1910	1911	1912	1913
ALL OTHER PAPER.					
Austria-Hungary	$14,136	$6,861	$18,503	$9,195	$8,345
Belgium	3,484	5,410	5,897	6,447	7,739
China	....	....	....	....	4
Denmark	1,035	1,448	....	....	....
France	954	540	3,936	2,050	856
Germany	114,057	180,099	244,007	148,216	285,554
Netherlands	....	1,037	....	196	176
Norway	554	....	3,928	2,569	7,679
Russia	....	....	....	71	....
Sweden	43,885	13,965	58,911	52,973	44,328
Switzerland	....	684	312	6	34
United Kingdom	10,680	5,984	3,816	7,202	20,325
United States	2,323	14,618	8,842	1,403	9,238
Total	191,108	230,646	348,152	230,328	384,278

NAGASAKI.

From Consul Karl F. Deichman.

As the principal local demand is for "Japanese paper," which answers all domestic requirements, the market for imported paper is quite limited, the amount imported into this consular district during the year 1912 being only $6,370, of which the greater amount is for printed books and periodicals, copybooks, drawing and writing books, and drawing paper. The great bulk of the paper used in this district is of local manufacture, including the "European style" and newspaper rolls, and the small demand for imported paper is mostly supplied through the importers at Kobe. Both high and low grade paper is used for correspondence, according to the means of the users.

The exports of paper from this consular district during the year 1913 amounted to $162,757, destined to China, Kwantung, and Manchuria.

The kinds of paper exported and their value were as follows: Toyo and hirogata, $68,700; hanshi and mino, $37,238; European, $12,662; all other, $38,213; books and journals, $5,944; total, $162,757.

The total imports of paper into this consular district during the year 1912 amounted to $6,370, of which amount $5,384 was entered at Nagasaki and $986 was entered at the port of Moji. The figures for 1913 are not as yet available.

The amount of wood pulp imported into this consular district during the year 1912 was 12,091,285 pounds, valued at $251,545, and during the year 1913 only 8,142,890 pounds, valued at $178,198. This pulp was entered through the port of Moji. Most of the wood pulp imported into Japan is entered at Kobe, the amount imported during the year 1912 at that port being valued at $1,167,898, and at Yokohama $761,728, or a total for the whole of Japan of $2,181,171 during the year 1912.

The import value of wood pulp into Nagasaki consular district during the year 1913, by countries, is as follows: Sweden, $77,040; Germany, $70,818; Norway, $18,071; all other countries, $12,269; total, $178,198.

CHOSEN.

From Consul General Ransford S. Miller, Seoul.

The market in Chosen for paper of all classes is controlled by Japan, as shown by the fact that while very little paper of any kind is manufactured here, the total value of the paper imported during the year 1913 was $672,939, of which Japan furnished $602,764. The remaining $70,175 was divided among several other countries, including China, the United Kingdom, Germany, Austria-Hungary, and the United States, the portion falling to the latter during the year being $4,798.

The requirements of the market are shown by the following classified list of imports under the paper schedule, as given in the customs returns for 1913: Cigarette paper, $47,473; European paper, $283,646; foolscaps (writing paper), $1,762 and all other writing paper $33,102; Japanese (Hanshi) paper, $107,370; hanging paper, $36,928; Chirigami paper, $71,336; all other paper, $91,322; total, $672,939.

Fully one-third of the above total, it will be noticed, consists of distinctive Japanese varieties of paper designed for the use of the brush in the oriental style of writing.

There are no modern paper mills in Chosen. The native product, still made by primitive methods in small quantities from the bark of the hibiscus and other vegetable fibers, is a tough texture used principally in place of glass for covering windows, the manufacture of fans, and similar purposes. Some Korean paper goes into China and Asiatic Russia for like uses, but in amount not exceeding $50,000 annually.

Cigarette paper comes in small quantities from the United States and from Austria-Hungary, mainly through Great Britain. Japan controls the trade as a whole, and has for several years past, owing to geographical proximity, political control, and a thorough understanding of the market.

The chief consumers of paper in Chosen are the government offices, a few newspapers, and the schools. There is a small demand for good letter paper and wall paper among the foreign community.

TAIWAN (FORMOSA).

From Consul A. A. Williamson.

Since Japan acquired Formosa—or Taiwan, as it is now officially known—much has been done to develop the island and to extend civilizing influences among the people; but the standard of living has not yet arrived at that state when paper of a good grade becomes a necessity. There is not even a demand for newspapers commensurate with the population, for there are but three daily journals at present, while the latest census shows that there are in the island over 3,000,000 native Chinese and about 109,000 Japanese. The three newspapers have a circulation of from 8,000 to 20,000 copies, so that less than half of the Japanese, even, read the news. This fact clearly demonstrates that the people do not feel the want of paper except to meet a few needs.

There is practically no paper manufactured in Taiwan, except a very coarse paper made by the native Chinese farmers from bamboo by a primitive process. During the years 1910 to 1913 there was a paper mill at Kagi, operated by the Mitsubishi Goshi Kaisha, of Japan, where paper was made from bamboo by the sulphuric acid process, but the unsatisfactory results, owing to the high cost of chemicals and of labor, caused the mill to be shut down. An expert was sent abroad by the company for the purpose of studying methods in foreign countries, and it is expected that after his return the mill will be reopened. While the forests upon Mount Ari should, in the course of time, provide good material for paper, in the shape of pulp, the railway giving access to the forests is still meeting with almost unsurmountable difficulties.

MARKET REQUIREMENTS.

Taiwan relies altogether upon other than domestic sources for its supplies of paper. At present England supplies the only good grades (or what would be known as such in occidental countries) and China the poorest. Japan supplies the bulk of the paper used in Taiwan for newspapers, correspondence, both official and private, etc.; that is to say, Japan supplies the renshi (or rolls of paper) for printing, the hanshi (a soft, thin paper, nearly white) for official use and for correspondence, and similar grades of paper that take the Chinese ink readily when applied with the native brush pen. China supplies coarse paper, the largest part of the imports from that country being reipaishi, or "joss paper." The English paper comes through Japanese houses and is of a better quality; it is used for making a small number of blank books and for the higher grades of printing.

There are but two or three printing offices in the island, and these are generally run in connection with newspaper printing offices. Blotting papers are not used in native writing, nor are carbon papers; such papers are only used by students and by firms doing business in the foreign fashion, and these get their supplies from one or two small dealers who buy in Japan. A little cardboard is brought in and used for making boxes. It comes from Japan and is made there.

From this general review of the conditions of the paper market it will appear that Taiwan holds out little inducement to American manufacturers, for while some American paper might be used here it would not be imported direct but would be brought in through Japanese jobbers or through Japanese ports; hence it seems that it would not pay American manufacturers to make special efforts in Taiwan, but that they would find that efforts spent in Japan looking toward capturing the trade there would react in Taiwan, which is a colony and an outport and a subsidiary branch of the Japanese market.

YOKKAICHI.

From Consular Agent W. de L. Kingsbury.

From careful investigation I find that most of the paper used in and around Yokkaichi and Nagoya is of Japanese manufacture and style. There is a small demand for foreign paper, but all imported through Kobe and Yokohama. Any statistics, therefore, would be a duplication in part of import statistics from these two ports.

There does not seem to be as yet much demand for foreign-style paper, but I believe such demand can be created by careful and telligent advertising.

SIAM.

From Vice Consul General Carl C. Hansen, Bangkok.

A review of Siam's paper trade for the last 10 years shows a steady increase in the imports of unprinted paper for each year, the value of the imports for the fiscal year 1913–14 being the highest on record during that period, namely, $204,906. The import values for the five preceding fiscal years were $180,141 for 1909, $184,033 for 1910, $191,270 for 1911, $184,499 for 1912, and $188,832 for 1913.

The value of the imports of unprinted paper into Siam from the leading countries during the fiscal years ended March 31, 1913 and 1914, is shown in the following table:

Countries.	1913	1914	Countries.	1913	1914
Austria-Hungary	$11,637	$13,882	United States	$2,696	$3,567
Belgium	5,354	2,100	Other countries	7,919	8,544
China	57,202	31,722			
Germany	15,664	21,336	Total	188,832	204,906
United Kingdom and dependencies	88,360	123,735			

The imports of books and other printed matter has shown considerable increase recently, the values of the imports amounting to $40,838, $37,727, $50,838, $76,039, and $75,499 for the fiscal years 1910, 1911, 1912, 1913, and 1914, respectively. The share of the United States in these imports was $1,295 for 1913, and $1,499 for 1914.

Paper manufactures advanced in import value from $120,113 in 1913 to $143,991 in 1914. Belgium, Germany, and the United Kingdom lead in this trade in the order named.

The import duty on paper and its manufactures is 3 per cent ad valorem.

SIBERIA.

From Consul John F. Jewell, Vladivostok.

Before the imposition of customs duties in the Russian Far East considerable quantities of paper of different kinds were imported from European countries and some from the United States. With few exceptions, at the present time, all classes of paper are imported from European Russia.

While figures as to the amounts of the various kinds of paper used are unobtainable, the grade known as No. 6 is the one most in demand, being used by all Government offices. The size mostly used is what is known as 2-sheet (22 pounds, 24 pounds, 26 pounds, and 28 pounds per ream); 4-sheet (44 pounds, 48 pounds, 52 pounds, and 56 pounds per ream); and 28 by 42 inches (80 pounds, 100 pounds, and 120 pounds per ream).

The best writing paper for ordinary use comes from Riga and the poorer grades from European Russia. Book paper is of European Russia origin, other than Finland, while news paper comes from Finland as well as other European Russia. The better grades of wall paper are from Riga and Finland; wrapping paper and cheaper grades of paper from other European Russia; tissue, blotting paper, etc., come from Riga, other Russian cities, and from Japan. Some carbon paper comes from Russia and Germany, but small quantities of the best grades are imported from the United States. As no paper boxes are made in this district, very little strawboard, box board, etc., is imported.

Most of the paper in general use for social and commercial correspondence is of low grade and chiefly of Russian manufacture. In recent years small amounts of the better grades for social correspondence have been introduced from Russia, Germany, and England. Recently a trial order was sent to the United States by the largest supply and stationery house in the Russian Far East.

Owing to the fact that duties are so high, the import of foreign paper is very small. The Russian manufacturers also have the advantage of direct shipping facilities, both by direct steamers from the Baltic and Black Sea ports as well as railway communication. Germany and the United Kingdom also have the advantage of direct steamers and cheap freight to the Russian Far East. Russian manufacturers grant exceptionally favorable terms; that is, payment from six to nine months after goods are received by consignee.

The estimated value of imports of paper of all kinds into Vladivostok only are as follows: 1892, $125,000; 1902, $400,000; 1913, $1,000,000.

STRAITS SETTLEMENTS.

From Vice Consul General Casper L. Dreier, Singapore.

The market for paper in the Singapore consular district is one of a very general character. It can not be said that this market demands any particular class of paper, as all sizes, classes, weights, and colors familiar to paper makers the world over are in use in Singapore. The market extends throughout the Straits Settlements, also to the Federated Malay States, and in a small degree to the private Malay States as well.

The importation of paper of all classes is confined to from 12 to 15 different firms throughout the entire district, and with the exception of possibly four or five all of these firms are located in Singapore, making it quite a distributing center. The usual method of procedure is to make importations and resell to the smaller shops, dealers, and printers. The principal newspapers, of which there are four of considerable size in the entire district, import their paper direct and it is found that the market in general is in quite a good many different hands, considering the present small or limited demand.

At the present time practically all of the paper is received from Great Britain, with also a certain percentage coming from Austria-Hungary and Germany and a quantity of paper ware from Hongkong and China.

The importations from the United States amount to practically nothing as compared with the other sources of supply. This does not mean that there is not an opening for American paper, for the indications are that the American paper could be marketed here if certain conditions were met and requirements complied with on the part of the American manufacturers; but even then it is not probable that a large enough demand would be found to justify much effort or expense. American paper can be sold here, however, and it has been sold in the past in larger quantities than at present.

According to the official statistics there was an increase in the importation of American paper during 1911 over 1910, but the amount imported in 1912 dropped down to about one-third of that of 1911. The exact reason for this can not be stated, but the opinion advanced by several of the local firms is to the effect that during 1911 there was quite a boom in this vicinity in rubber, and there were many estates and companies organized requiring large quantities of paper for printing prospectuses, company reports, and papers of this nature, requiring a more or less high-grade paper; but since then there has been very little activity along the lines of organizing and promoting.

In view of the general form in which the official statistics are published, it is not possible to show the precise amount of each kind or class of paper used in the district, but it is found that the paper most in demand is the glazed cream laid, plain ruled; also a considerable quantity of the ordinary news-paper grade. The statistics of import for 1912, which are the latest available at present, are shown below with the countries of origin. Attention is called to the fact that these statistics cover the heading of "paper and paper ware," which, of course, takes in paper of many classes as well as certain wares and articles made of paper, a great variety of which come from China and Hongkong. China and Hongkong figure largely in the supply of this market. The paper importers consulted state that no paper of the better grades comes from these sources of supply.

Countries.	Value (U. S. gold).	Countries.	Value (U. S. gold).
PAPER AND PAPER WARE.		STATIONERY.	
United Kingdom	$222,894	United Kingdom	$265,489
Hongkong	232,751	Hongkong	7,322
Austria-Hungary	209,305	Austria-Hungary	5,996
Belgium	48,254	France	23,399
Germany	45,416	Germany	24,297
Sweden	12,886	China	9,083
China	196,991	United States	10,218
United States	2,781	Total	345,804
Total	971,278		

There are no paper mills in this vicinity nor raw materials of a marketable extent available.

MARKET REQUIREMENTS.

The opinions and comments received from a number of the principal exporters and publishers are embodied below. They bring out the actual existing conditions in a way that should enable manufacturers and exporters to determine what the best line of procedure shall be. One firm made mention of the fact that representatives of American paper houses are seldom seen in the Singapore district. A large American publishing house here stated that they did not use American paper on account of the great time consumed in effecting delivery. Most of their paper is delivered in two, three, or three and a half months after date of order. Such goods as they purchase in America, they state, including slates, imitation leather, some books, school furniture, etc., take five, six, seven, eight, and more months for delivery. At the present time (Apr. 20, 1914) this firm is still waiting for the arrival of a cargo ordered by cable on September 15, the payment having long since been made. According to the English habit they are allowed 30 days after the approximate arrival of the goods before payment is required. These delays would be absolutely fatal to their paper trade. This firm also points out that the American paper sizes are not the same as those in foreign use in this colony, necessitating the cutting of the ordinary work to waste. Yet in order to purchase the sizes required the buyers must take half a ton of writing or a ton of printing paper, which is only possible on about 12 or 15 of the 150 possible lines that are stocked.

These people are in full sympathy with American-made articles, but they frankly admit it would be difficult to improve upon the cordiality of their business relations with many English firms. They state they have always paid cash in New York, as against 30 days sight draft from London. Their annual paper purchases amount to about $12,000 to $15,000 Straits Settlements currency ($6,812 to $8,515 United States currency).

A great deal could be said in regard to the effort on the part of American manufacturers and exporters to establish their goods in foreign markets, but the most obvious and earliest step necessary is that of becoming able to make deliveries when promised, packing goods so that they can be used upon arrival and not in such a way that they will be ruined, and by taking advantage of the most rapid freight lines in forwarding goods, when particular anxiety is expressed by cable for early receipt of orders, etc.

It must be borne in mind that there are energetic competitors in other countries who pay particular attention to catering to the requirements and conveniences of the foreign buyers, and that with the excellent merits of most articles of American manufacture the proper attention to certain details would result in a marked increase in America's foreign commerce.

TURKEY IN ASIA.

ALEPPO.

From Consul J. B. Jackson.

Practically all of the paper imported into the Aleppo consular district comes from Italy and Austria and arrives through the ports of Alexandretta and Tripoli. This covers all of the paper used here, as there is none manufactured locally. The possibility of selling American-made paper in Aleppo depends upon prices and whether or not Americans will quote prices in francs c. i. f. ports of entry, measurements in centimeters, and weights in kilos. Only inferior qualities are demanded as a rule, the smallest differences in quotations and convenience in terms swinging the business.

The import trade in paper is in the hands of Austrian and Italian manufacturers, favored by extensive production, close proximity, and convenient direct shipping lines. Special pains are taken to quote prices c. i. f. ports of entry and liberal terms are granted to responsible parties. Manufacturers of those countries do not enjoy preferential duties, and no reason can be added for their success except the activity and continual presence of traveling salesmen. Any of the Aleppo commission houses not at present engaged in the line might undertake the importation of American-made paper.

There are no large users of paper that would buy direct, and the various small departments of the local government purchase individually in very small amounts.

There are no customs or other statistics to show classified returns of the imports of paper, but the following are estimates gathered from the local importers: From Austria, 1,317,288 pounds, value $41,174; Italy, 712,000 pounds, value $31,070; total, 2,029,288 pounds, value $72,244.

In addition, there is a very small quantity of carbon paper imported, as people of this country do not employ it generally, preferring to use press copy books.

BEIRUT.

From Consul General W. Stanley Hollis.

The greater part of the paper imported here is manufactured from wood pulp and is of the cheapest quality. Almost all of this comes from Austria. Small quantities are imported from Italy and from the Netherlands. Hardly any rag paper is imported.

Some three or four years ago the Netherlands occupied the first rank among the exporters of paper to this part of the country, but since then Austria has vigorously pushed its paper industry into these markets and has succeeded in competing. Of late Germany, also, has been making efforts to gain a share of the paper trade here. Wrapping paper, however, still comes chiefly from the Netherlands, as does also a very low grade of paper for newspapers.

Some small quantities of the best grades of American bond and letter papers are sold here, but the demand for these high-grade papers is very limited, and British and Netherlands manufacturers also sell small quantities of high-grade papers in this market.

The quantities, by weight, of the different classes of paper imported here during the four calendar years 1910–1913, inclusive, are as follows:

Classes.	1910	1911	1912	1913
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Paper, extra fine quality	96,800	116,600	115,500	124,300
Artists' and architects'	1,899,700	2,088,900	1,850,200	2,288,400
Wrapping paper	10,230,000	12,474,000	14,584,900	14,041,500
Fine paper	5,120,500	4,944,500	5,214,000	6,487,800
Cigarette paper	1,593,900	1,306,800	1,699,500	1,787,500
All other paper	7,492,100	6,017,000	6,473,500	8,098,200
Total	26,433,000	26,947,800	29,937,600	32,827,700

The c. i. f. Beirut wholesale prices during the four years 1910–1913 of the different grades of paper consumed here were as follows:

Classes.	Unit of quantity.	1910	1911	1912	1913
Writing, 6-letter sheet, from Germany	Ream[1]	$2.40	$2.40	$2.40	$2.40
Fancy, small note, from Germany	50 sheets and 50 envelopes.	.77	.77	.77	.77
American bond, large post, 24 by 19¼ inches.	400 sheets				2.26
Ledger, small post, 20½ by 15¾ inches	480 sheets	2.26	2.26	2.26	2.26
Typewriter paper, letter size	1,000 sheets	.44	.44	.47	.47
Blotting paper, standard English size	480 sheets				3.53
Book paper:					
18½ by 26¾ inches, mostly from Holland	Ream	1.31-1.41	1.41	1.49	1.49
Second quality	do				1.31
Bible paper:					
29½ by 37 inches	do	1.96	1.91	1.91	1.97
Glazed	do				2.21
News paper:					
18⅝ by 28 inches	do	1.08	1.06	1.06	1.06
Cheapest quality	Pound	.045	.045	.0425	.0425
Another quality, 29½ by 18⅝ inches	Ream				.7125
German, 41½ by 31½ inches	Pound				.035
French, 41 by 31⅞ inches	do				.0394
Austrian, 28¼ by 18¼ inches	do				.0377
Austrian, 25⅞ by 20 inches	do				.0447
Netherlands, 32¼ by 22¼ inches	do				.0263
Wrapping paper, various sizes, from—					
Netherlands	do				.015
Sweden	do				.025
Germany	do				.0275
Austria-Hungary	do				.015
Strawboard	do	.045	.045	.0425	.0425

[1] Of 500 sheets.

The freight rates on paper from the United Kingdom and the Netherlands to Syria are much lower than from America to this country. There are direct sailings from the first-named countries, but none from America to the Syrian ports. Consequently all American shipments for Beirut must be transshipped at either Naples, Genoa, Trieste, Piraeus, or Smyrna. No through rates on paper shipped from American ports to Beirut can be ascertained here. Owing to their greater proximity to these markets, Italy and Austria-Hungary are even in a more advantageous position than the United Kingdom and the Netherlands in the matter of freight rates. In spite of these disadvantages, however, some small quantities of high-grade American bond and ledger paper are imported here, and these importations will probably increase in the future.

American paper exporters who wish to do business in this country should submit samples and quote prices c. i. f., in gold francs, at Beirut; and they should also bear in mind that the majority of the European firms selling paper in this country give 30 days' credit, or a discount for cash, payable on receipt of the bill of lading and other shipping documents.

HARPUT.

From Consul W. W. Masterson.

It is exceedingly difficult to explain just how inferior the paper market of Harput is. However, an idea will be gained when it is stated that the merchant who handles horseshoes and overshoes also handles what inferior kinds of paper can be found in the market.

No merchant handles paper exclusively, and generally the orders for paper are sent by a merchant to Constantinople to a wholesaler there. The public must buy what is offered or do without. There is no demand, however, for a good class of paper for any kind of use, and linen paper is unheard of.

The principal uses for paper in this market is for school and government work, printing, correspondence; and wrapping paper for cotton yarn and silk goods; and a coarse light paper of a tough texture is used extensively by the villagers and poor for putting in the windows of their dwellings to keep out the rain and snows of winter. This paper in the windows is used as a substitute for glass; it is greased when put in and is thus semitransparent.

There could only be limited market for paper in this district; but with a little more knowledge and enterprise this line of merchandise could be made a more paying one than it now is, and it would probably grow as well. The local government is forced to buy its paper for all the offices in the local market, and also the paper for a small newspaper that is issued by one of the departments of the government. Recently through this consulate an effort was made to buy a line of paper for government official use from American paper manufacturers, but the firm finally decided that they did not care to bother with a small order, although assured that a small but steady demand would probably result if the order came up to requirements. Since that refusal no further efforts have been made by the government to procure paper anywhere but in the local market.

The American mission at Harput also uses a considerable quantity of paper in school work, and also several kinds of issues are brought out from their press—a small magazine, tracts, and leaflets of different kinds—but all the paper used at the mission is brought direct from America by their own orders.

One of the principal drawbacks to the increase of the paper market in this city or to the increase of any commodity is the exorbitant freight rate that must be paid on orders from abroad. It may be well to state that this city is over 300 miles inland, and all orders are either brought in by caravan or small wagons over mountainous roads, and frequently the cost of freight amounts to more than the article itself. In illustrating this point the president of the American Mission College at Harput recently mentioned that he had just received an order of paper from America that weighed 2,460 pounds; the freight from New York to Samsoun, the seaport, was $8.60; lighterage, commissions, handling, etc., $8.05; freight from Samsoun to Harput, $75.

The paper imported into this district for the year 1913 amounted to a total of $21,000, and of this amount the paper used in cigarettes amounted to $9,000 and other kinds amounted to $12,500. This has been about the average during the past several years.

JERUSALEM.

From Vice Consul S. Edelman.

The great bulk of the paper consumed in Palestine is used for printing purposes and a small amount for writing and wrapping. The trade is supplied principally by Austria-Hungary, Germany, and Sweden.

About 100 tons of paper are annually consumed, of which 75 per cent is book paper; wrapping and writing papers form the balance.

Writing paper, including bond and linen, with a glossy finish, weighing 50 double sheets to the kilo (2.2 pounds), size 64 by 29 centimeters (1 centimeter = 0.3937 inch) of single sheet, is in general demand.

The great portion of the book paper is used for the printing of circulars, biblical literature, and newspapers. The standard size is 47 by 60 centimeters, made up in packages of 250 sheets, the weight being 15 to 18 kilos (33 to 40 pounds) per 1,000 sheets. The size used for newspapers is slightly larger, being 54 by 74 centimeters. The average wholesale price for this variety of paper is from $0.06 to $0.13 per kilo.

For wrapping purposes a brown bogus manila paper is principally used, weighing 28 kilos (62 pounds) per 1,000 sheets, and costs $4.63 per 100 kilos (220.46 pounds); there is also a small sale of white wrapping paper, weighing 40 kilos (88 pounds) per 1,000 sheets and costs $7.33 per 100 kilos (220.46 pounds). No wall paper is used in this country, as the walls are generally whitewashed or painted.

The export of oranges from Jaffa involves the consumption of a good deal of tissue paper for packing. During 1913 about 3,000 bales of tissue paper, each bale containing 20,000 sheets, were imported from Austria-Hungary and Sweden, the price of a bale being about $10.

A small amount of blotting paper is used, the weight being 35 kilos (77 pounds) per 1,000 sheets and costing about $0.19 per kilo. An equal amount of strawboard is used, size 50 by 65 centimeters, weighing 60 kilos (132 pounds) per 1,000 sheets. For the manufacture of copybooks and notebooks a white glazed paper is imported, size 42 by 34 centimeters, weighing 9 kilos (20 pounds) per 1,000 sheets and costing $8.69 per 100 kilos (220.46 pounds); there is quite a large sale of this particular paper.

Owing to the large correspondence, which is a feature of the religious and charitable institutions in Jerusalem, there is an enormous sale of envelopes, especially of the cheap variety. A blue-colored envelope, square in shape, is imported from Germany at $0.31 per 1,000; this is the cheapest, but there is also a sale of a slightly better quality.

The total absence of raw materials precludes all possibility of home production. The values of paper imported for the four years 1909 to 1912 are as follows: 1909, $77,351; 1910, $85,590; 1911, $100,982; 1912, $33,726. There was a gradual increase in the consumption until 1912, when there was a marked decrease, owing to unsteady business conditions and the fact that merchants bought very heavily in the previous year, when prices were very favorable in Europe.

The proximity of the European markets to this district has a marked influence on the trade, but with direct shipping facilities about to be inaugurated American exporters should stand on an equality with their European competitors.

Prices are generally quoted in France per 100 kilos (220.46 pounds) c. i. f. Jaffa, and terms are usually 3 per cent discount 30 days after receipt of goods or 6 months net. American trade must adhere to these conditions if an opening is desired in this market. The duty on all paper imported is 15 per cent ad valorem, but, together with porterage, quay duties, etc., the duties mount up to 17 per cent.

MERSINA.

From Consul Edward I. Nathan.

The city of Mersina has only 25,000 inhabitants, but it is the port of entry for the Turkish Province of Adana and part of the Province of Angora. As the bulk of the population of all this country is engaged in agriculture and much illiteracy exists, the use of paper is limited.

The writing paper used here is of very inferior quality and is mostly reimported from Smyrna and Constantinople. About 100,000 pounds of such paper is, however, imported directly from Austria-Hungary and France every year. This paper is about 8 by 11 inches, ruled, and comes in double sheets. It costs from 4 to 5½ cents per pound delivered at Mersina.

While there is a newspaper published in the city of Adana and one in Tarsus, their circulation is limited to a few hundred copies each and they obtain their paper in Constantinople. A few small printing presses are operated in this district for commercial printing, but they also obtain their supplies from other cities of Turkey.

The principal item of paper imports consists of straw and bogus manila wrapping paper. About 1,000 bales of straw paper are imported annually from Belgium and France, mostly the latter. This paper costs 1.7 cents per pound delivered at Mersina. About 400 bales of the manila paper are also imported, 100 bales from England and the balance from Germany. This paper costs 1.8 cents per pound delivered at Mersina.

From 44,000 to 55,000 pounds of cardboard are required here every year. This cardboard is imported from Germany and is used mostly for stuffing shoe soles. It costs 1.8 cents per pound delivered at Mersina. About 100 bales of thin pasteboard, used for making small boxes, are imported from Austria-Hungary. This pasteboard costs 2.1 cents per pound.

Rice paper for making cigarettes is also imported, 300 bales of large sheets of this paper being imported annually at a cost of $0.87 to $1.05 per ream. Austria-Hungary furnishes most of this paper. This paper is prepared locally for those who make their own cigarettes. Prepared cigarette paper is also imported, mostly from France, imports of this amounting to 100 cases per annum. Each case contains 100 boxes of 60 packages of cigarette paper and the cost is 35.7 cents per box. Cigarette paper is not subject to any special tax or restriction as to its sale.

There are no paper manufactories of any kind in this district nor are any materials suitable for such exported from here. A paper factory has been projected for straw paper. A local grass is said to be excellent material also.

There have been no important changes in the character of the local demand for paper. The quantities imported vary little from year to year and the same countries continue to supply the market. Austria-Hungary, France, and Germany have direct steamship lines to Mersina, while shipments to the United States would have to be transshipped at one or more points. Quotations are always c. i. f. Mersina. There is a uniform duty of 15 per cent ad valorem on all imports into Turkey.

Paper is usually sold for cash against documents upon the arrival of the merchandise at Mersina. In the case of cigarette paper, however, an extended credit is given.

SMYRNA.

From Consul General George Horton.

The Smyrna market is generally supplied by Germany, Austria-Hungary, Italy, Netherlands, France, and Belgium. America, by reason of the longer distance and the higher freights, can not easily compete with the other places of production located at lesser distance.

As a general rule only low to medium grades are used in all kinds of paper. There is no home production, all paper being imported from Europe.

The following is a table of the latest statistics of paper imports into Smyrna, by classes, from March, 1910, to March, 1911:

Classes.	Quantity.	Value.	Classes.	Quantity.	Value.
	Pounds.			*Pounds.*	
Blotting paper	213,898	$8,728	Different papers	1,080,748	$49,151
Packing paper	4,618,739	89,048	Boards of all kinds	1,295,257	26,514
Drawing paper	20,011	1,749	Copybooks and registers	226,366	18,833
Printing paper	114,123	3,824			
Writing paper and envelopes	516,394	38,408	Books, printings, and manuscripts	111,126	20,602
Wall paper	39,828	1,882			
Tissue and mouthpieces for cigarettes	431,024	63,314	Total	8,667,514	322,053

Statistics of imports by countries are not obtainable, no regular record being kept. The greatest obstacle to the promotion of American trade in Smyrna is the method of quoting prices and the stiff terms demanded of the importers by American manufacturers. American producers quote f. o. b. New York, while customers here are accustomed to buy c. i. f. Smyrna. European manufacturers accord certain facilities in the payment of the goods which are in perfect harmony with the requirements and the standing of the importers in Smyrna, so that before the American factories can come in for an appreciable share of the trade it will be necessary to allow the same facilities in the payment of goods. It would also be conducive to business if quotations could, wherever possible, be given in francs per 100 kilos, our buyers being much more familiar with the metric system of weights and measures than with dollars, cents, inches, and pounds. A further obstacle is the ocean freights, which in the case of paper or other bulky merchandise would reach a very high percentage, as compared with the low, combined through rates offered to the European shipper by the steamship companies in the Mediterranean basin

TREBIZOND.

From Consul Alfred S. Northrup.

There was imported, at the port of Trebizond, during the year 1913, paper to the value of $95,620 (U. S. currency). It is safe to assume that the aggregate value of the paper imported at the other ports of this consular district, viz, Samsoun, Korassund, Ordou, Rizeh, and Tireboli, was at least equal to that imported at Trebizond, and probably somewhat in excess, so that probably the total 1913 imports of paper into this consular district may be placed safely at $200,000.

The following detailed list shows the classes, quantities, values, and countries whence imported, of the paper entering Trebizond during 1913:

Classes.	Countries.	Weight.	Value.
		Pounds.	
Wrapping, gray	Netherlands	220,000	$4,000
Wrapping, mauve	Germany	220,000	5,200
Straw (bags)	Netherlands	110,000	1,600
Wrapping, cellulose	Germany	13,200	600
Wrapping, "Affiche"	Austria-Hungary	17,600	600
Cardboard, white [1]	do	22,000	3,800
Cardboard, yellow [1]	Netherlands	22,000	3,200
News paper	Germany	33,000	1,000
Writing paper	Austria-Hungary	246,000	18,200
Cards (visiting and correspondence)	Various countries		870
Envelopes	Austria-Hungary		1,850
Playing cards ... boxes	Belgium	150	10,100
Cigarette papers	Austria-Hungary		40,000
Copybooks [2]	Constantinople		1,700
Wall paper	Germany		900
All other kinds	Various countries		2,000
Total			95,620

[1] Used principally in the manufacture of boxes.
[2] Made up at Constantinople from European paper.

The paper used here is largely purchased through European commercial travelers, though a considerable portion is purchased in Constantinople, as that city offers easier terms and its nearness naturally invites trade on account of the expedition with which goods from there can be ordered and delivered. The terms quoted here by the European houses are cash on delivery, with 3 per cent discount, and prices are generally quoted c. i. f. Trebizond, or other port of delivery.

AFRICA.

ALGERIA.

From Consul Dean B. Mason.

Owing to the free entry of paper of French origin and the duty on paper manufactured in foreign countries, the greater part of the paper imported into Algeria is manufactured in France. No importations of paper from the United States are reported in the Algerian customs statistics.

It was stated by the most important importer of paper in Algeria that the requirements of the Algerian market are identical with those of the French market, and it is believed that only such kinds of American paper as can be exported to France can be sold profitably in Algeria. It is further believed that as the French market is much more important than the Algerian, such classes of American paper as would appear to be suitable for export had better be introduced in France before their sale in Algeria is attempted, and that first orders, which are likely to be small, should be filled by agency in France.

Some high-grade English writing paper is imported in small quantities and the amount of German photographic paper and Swedish and German pasteboard boxes imported is important as compared with importations of French goods of the same character.

MARKET REQUIREMENTS.

The Algerian customs statistics are not sufficiently detailed to furnish information as to the amount of each kind of paper imported into Algeria and there exists no other data from which it is possible to ascertain such information. Algerian dealers generally order directly from manufacturers or wholesale dealers in France and do not furnish information as to the importance of their business transactions.

The total value of paper and paper goods imported into Algeria during the last three years, according to the customs statistics, was as follows: 1911, $2,850,031; 1912, $3,452,577; 1913, $3,552,165. During the decade 1901 to 1910 the value of paper and paper products imported increased from $1,249,578 in 1901 to $2,938,542 in 1910, the average value of importations per annum during the decade being $1,851,223. During the past 13 years there has been a very steady and substantial increase in the value of paper and paper products imported into Algeria. Importations from foreign countries have been relatively important in respect to photographic paper and pasteboard boxes.

Shipping facilities from France are good and rates reasonable. Paper produced in the important manufacturing region, the Department of the Isere, is shipped via Marseille from factories to Algiers at the rate of $7.40 to $7.60 per ton. Paper produced in the vicinity of Paris or in the northwestern part of France is shipped via Havre from factory to Algiers at the rate of $6 per ton. Cost of transportation is paid by manufacturer.

Payments are generally made within 90 days after date of invoice, and it is customary to allow a discount of 2 per cent when payment is made within 30 days.

CANARY ISLANDS.

From Consul Homer Brett, Teneriffe.

American statistics show paper exported to the Canary Islands as follows: In 1907, $63; in 1908, $249; in 1909, $170; in 1910, $671; and in 1911, $189. While no official figures are obtainable, the importations for the last three years, in metric tons of 2,204.6 pounds, have been approximately as follows:

Countries.	1910	1911	1912	Countries.	1910	1911	1912
	Metric tons.	*Metric tons.*	*Metric tons.*		*Metric tons.*	*Metric tons.*	*Metric tons.*
Norway	698	292	660	Spain	64	62	98
Sweden	246	300	446	France	26	4	52
United Kingdom	192	308	194	Netherlands	14	42	178
Germany	160	132	218				
Belgium	94	40	132	Total	1,494	1,180	1,978

There is an annual importation of about 900 tons of old newspapers which, it is believed, is not included in the above figures. These newspapers come principally from Liverpool, are used here in banana packing, and have a c. i. f. value of $26.76 per ton.

MARKET REQUIREMENTS.

Tomato wrappers.—The islands purchase annually about 500 tons of paper for wrapping tomatoes. Three classes are used, known, respectively, as papel madera (wood paper), papel moreno (brown paper), and papel de seda (silk paper), and of the silk paper there are three or more qualities. The papel madera comes principally from Amot, Sweden, is cut to sheets of 38 by 91 or 23 by 38 centimeters (1 centimeter = 0.3937 inch), and is packed in bundles of 265 pounds. Its wholesale price in Canary Island ports is $48.79 per metric ton (2,204.6 pounds). Papel moreno, or brown paper, comes from Hamburg, cut in sheets 125, 140, and 150 centimeters square, packed in bundles of 200 kilos, and is worth $39.27 per metric ton in Teneriffe or Las Palmas. So far as can be learned all the silk paper used here is purchased in Goteborg, Sweden.

The quality or brand known as "M. G. sulfite" comes cut in sizes varying from 20 by 30 inches down to 15 centimeters square, and in bundles of 100 or 50 kilos, as required. It is quoted at $78.77 per metric ton. Silk paper, "cap" quality, is shipped in full sheets 20 by 30 inches or cut to sizes required, and is sold here for $65.38 per ton. It is packed in bundles of 100 kilos, except the 15-centimeter sheets, which are in packages of 75 kilos. "Canelo" silk paper comes only in sheets 25 by 25 centimeters, and in bundles of 100 kilos. Its price is $55.96 per ton. The largest packing house in the islands has shown me two kinds of paper such as they import for their own requirements. The first is a thin brown paper with a silky finish, in a sheet 9¾ inches square. The c. i. f. value of such sheets is given as $73 per ton. The second sample is a sheet of highly glazed white silk paper 20 by 9 inches, is of excellent quality, and is said to be sold here for $111.93 per ton.

Strawboard.—The same firm is experimenting with a new banana package, and has brought from Hamburg 700 tons of heavy strawboard, which is to be rolled into cylinders by machinery now being installed. Should the new method be as successful as is expected, this one firm will use about 3,000 tons of strawboard annually, and if it is adopted by all shippers the requirements of the islands for this material will be 9,000 tons or more.

News and other printing paper.—About 10 daily and many weekly papers are published in the Province, and the consumption of printing paper is about 600 tons annually. Subscription and advertising rates are low, and publications lead a precarious existence, so the demand is for paper of the cheapest sort. That used is imported from Goteborg in bundles of 50, 100, and 150 kilos, the usual sizes of sheets being, in centimeters, 38 by 91, 23 by 38, and 23 by 30. The present price, c. i. f. Teneriffe, is $46.84 per metric ton.

Wall paper.—About 40,000 rolls (8 meters long by 48 centimeters wide) are imported annually, principally from Brussels. A small portion comes from Germany. Second and third grades or medium qualities, costing wholesale from 4.8 cents to 9 cents per roll, are principally in demand, but local dealers stock some qualities valued as high as 45 cents.

Toilet paper and fly paper.—Drug stores, hardware stores, and some retail groceries carry toilet paper, and each one seems to have a different brand. English, German, and American makes are all to be seen, and it is believed that there is little difference in the prices. An English commission house quotes four qualities of toilet paper, in rolls of 12 ounces or packages of 500 sheets, f. o. b. London, at $4.47, $6.14, $7.03, and $9.61 per gross, with no charge for packing, but local importers probably purchase more cheaply than this. The usual retail price is 1 peseta (18 cents) per roll or package.

Fly paper was found on sale in only one establishment, and was of American make. Very little is used now. As it has never been advertised here, the existence of such an article is unknown to the greater part of the population.

Wrapping paper and paper bags.—Thin brown paper, used in groceries that do not have their wrapping material printed, is of Scandinavian or German origin. It comes usually in sheets of 17½ by 14½, and is sold here for $49.50 per ton. A strong, translucent, oil-finished paper is favored by retail stores that use printed wrapping paper and bags. It is bought in Hamburg or Amsterdam, but importers believe it to be of Belgian origin. It comes in sheets from 60 by 40 to 100 by 70 centimeters, and costs here $71.40 per ton. Paper bags are imported from Spain, and are also manufactured locally. Prices per 1,000 are: One-pound, $0.90; 2-pound, $1.26; 5-pound, $1.80. Eighteen cents per 1,000 is charged for printing.

Writing paper and envelopes.—Printing shops, drug stores, and the office-supply shops known as papelerias sell writing paper and envelopes, but there is no wholesale house and it is difficult to obtain any information of value. The products of the United States and of every country of western Europe are represented in the stocks. The islands are frequently visited by Barcelona salesmen and many business houses use stationery printed in that city. The numerous foreign firms buy their stationery in their own countries. An increasing amount of high-class paper for social correspondence is used, and this line is one in which American products are well represented.

No paper is produced in the islands and there is no import duty except harbor dues and light tonnage taxes, but it seems improbable that American paper makers will ever be able to compete with Europe in this market, except in the finer and more expensive grades. Even if the American factory cost were lower than in Norway, there would be a difference in freights to be overcome; for the fruit steamers from these islands to Europe must have return cargo and could quote rates which it would be impossible to meet. Something might be done in silk paper for tomato wrappers, in carbon paper, and in the finer grades of writing paper and envelopes.

EGYPT.

From Consul Arthur Garrels, Alexandria.

With the exception of the product of a small mill in Alexandria, the entire paper supply of Egypt comes from abroad. The importations approximate annually $1,600,000 in value. The paper used in the manufacture and packing of cigarettes is the only industrial consumption of paper in Egypt. With that exception the demand is limited to the ordinary requirements for writing, cheap printing, and for wrapping papers. Only a very small amount of paper is consumed in the local production of blank and account books. The larger part of the better class of the commercial stationery is also imported. The paper used in Egypt is of the general style and character as that found on the markets of western continental Europe. The consumers of paper in Egypt are not the native Arabs but the Levantines, Greeks, Italians, and other Europeans domiciled there.

Products made for the American market, it would seem, could hardly be placed in Egypt. Whether American paper made to conform in style, kind, and quality of that now being supplied principally by Austria, England, and Germany could find a market in Egypt, depends on the ability of the American producer not only to meet competition in price and terms of sale, but also on the extent to which he may be prepared to carry out a campaign of introduction. The extent of the Egyptian business would hardly warrant the production by American mills of special papers to meet the local requirements. Should American manufacturers, however, find it possible to produce paper suitable for the markets of continental Europe, they could no doubt obtain a share of the Egyptian business through their branches or agents at the larger European Mediterranean ports.

Since practically all the paper is imported, the quantities of the various classes consumed may be judged by the imports statistics given later. There is virtually no consumption of bond paper, and that of ledger paper is most limited, since all account books and the better class of commercial stationery are imported.

Wrapping papers are generally of a quality much inferior to that used in the United States. Colored wrapping paper, green, red, blue, etc., are in demand. The paper lining for tin cigarette boxes is for the most part supplied by the local mill. Paper for the manufacture of cigarettes is of the heavier grade and supplied by Austria. The sale of high-grade commercial and private stationery is limited. The larger European firms have their stationery generally supplied from abroad.

There is but one paper mill in Egypt and it is located in Alexandria. The available raw materials are straw and rags. The equipment of the mill comprises two paper machines, one a 60-inch and the other a 64-inch, besides a 64-inch cardboard machine. The weekly capacity of the mill is 30 tons of paper and 12 tons of cardboard. Only about 60 per cent of the maximum production, however, is regularly attained. The equipment comprises German, French, and American machinery. Labor may be considered cheap and inefficient. The prices of the local product are on a par with the imported articles. There is no exportation of paper from Egypt except a small amount of transshipment business.

The only available statistics of imports of paper into Egypt are those published by the Egyptian customs administration. Imports during 1913 aggregated $1,569,920 and are detailed in six classes by countries as follows:

Classes and countries.	Amount.
Writing and printing paper:	
England	$118,483
Germany	46,222
Austria	233,118
Belgium	26,676
United States	624
France	26,627
Netherlands	31,068
Italy	18,672
Norway	18,577
Sweden	33,523
Switzerland	120
Total	553,710
Other papers, including drawing paper, tracing cloth, blotting paper, carbon paper, etc.:	
England	30,464
Germany	21,727
Austria	12,355
Belgium	828
United States	434
France	11,068
Netherlands	1,272
Italy	4,466
Switzerland	140
Total	82,754
Cigarette paper:	
England	2,460
Germany	65
Austria	155,723
Spain	968
France	12,350
Italy	32,819
Turkey	27,795
Total	232,180
Paste and card boards of all kinds:	
England	8,398
Germany	36,706
Austria	67,655
Belgium	7,290
France	3,144
Netherlands	13,368
Italy	6,542
Paste and card boards of all kinds—Continued.	
Norway	$594
Sweden	3,274
Total	146,971
Wrapping paper:	
England	11,203
Germany	36,302
Austria	195,463
Belgium	17,036
France	109,995
Netherlands	28,079
Italy	108,492
Norway	29,596
Sweden	8,413
Switzerland	85
Total	544,664
Wall paper:	
England	1,557
Germany	3,458
Austria	524
Belgium	728
France	2,954
Netherlands	170
Italy	150
Switzerland	100
Total	9,641
Total importations by countries:	
Austria	664,838
England	172,565
Germany	144,480
Belgium	52,558
United States	1,058
France	166,138
Netherlands	73,957
Italy	171,141
Norway	48,767
Sweden	45,210
Switzerland	445
Spain	968
Turkey	27,795
Grand total	1,569,920

As will be seen, Austria furnishes about 43 per cent of the total importations, while the shares of Germany, France, and Italy are about equal. Austria and England lead in writing and printing paper. England and Germany in the higher grades of paper, specialties, carbons, etc. Austria furnishes over 70 per cent of the cigarette paper. Paste and card board come principally from Austria and Germany.

There is nothing in the statistics to indicate that in the past five years there has been any change in the source of supply or in the quota of paper furnished by the various countries to the Egyptian market. All the European countries doing the larger amount of the paper business in Egypt are in direct steamship connection with Egyptian ports. Paper pays the common import duty of 8½ per cent ad valorem; no country has any special concession.

The large jobber or wholesaler does not exist in Egypt. Paper, like other manufactured articles, is placed through agents and commission houses. The larger part of the paper business is done on six months' credit. Some of the larger commission houses are in a position to do business on better terms if the price warrants.

KONGO.

From Vice Consul General Harry A. McBride, Boma.

Kongo offers a very small market for paper. There is only one important printing establishment, the Government office at Boma, which prints the official bulletins and other documents. The one newspaper of the colony, the Etoile du Congo, is a four or eight page weekly published at Elizabethville, Katanga, the office being also equipped for job printing. The size of the newspaper is 20 by 30 inches (double sheet) and the stock used is a good quality of white print paper that will take half tones. Aside from these there are two or three printing establishments operated by the missionaries, but they use only small amounts of paper.

The principal users of stationery and printed forms are the State officials, their supplies being furnished by the Colonial Ministry at Brussels.

In 1912 (latest statistics available) the total import into Kongo of books, registers, and printed matter was valued at $32,300, of which $27,213 came from Belgium and the remainder principally from the United Kingdom. The total value during the preceding year was $52,640.

Imports of paper and cardboard in 1912, by countries, were as follows: Belgium, $16,662; South Africa, $1,331; United Kingdom, $1,016; Germany, $653; Rhodesia, $209; other countries, $629; $20,500. The total imports supplied by the same countries in 1911 amounted to $21,238. Imports of paper from the United States were valued at $25 in 1911 and $46 in 1912. No paper is produced in Kongo, and there are no exports thereof.

LIBERIA.

From Consul General George W. Buckner, Monrovia.

There are no statistics available in Liberia concerning paper. For the most part merchants here do not even keep paper of any sort in stock for sale, but small orders are shipped to individuals direct from

European retailers and jobbers. No material of any kind for the manufacture of paper is produced in this country. Commercial opportunities are nil at this time for American manufacturers or jobbers.

MOROCCO.

From Consul General Maxwell Blake, Tangier.

Until very recently the demand for paper in Morocco was confined to the very limited number of European or Europeanized native Jewish firms then doing business in the country and acting as the intermediaries between the natives and the outside world. Formerly the consumption of paper for administrative purposes by the Maghzen (Moorish Government) was not comparable to the quantities utilized by the smallest civilized European Governments. Under the new order of things, however, following the inauguration of the French protectorate, conditions are rapidly changing, and very considerable quantities of paper are now undoubtedly being used in the country in official administrations and otherwise, the former finding no mention in the customs returns on account of the fact that Government supplies are nondutiable.

The new activities in the importation of paper are coincident with the military invasion of the country, consequent upon the establishment of the protectorate. Owing to the pacification of the hinterland great impetus has been given to trade, and commerce is generally reviving in all quarters, as will be apparent in the following figures, showing the value, in American currency, of total imports of paper of all classes into Morocco for the years 1909 to 1912: 1909, $50,004; 1910, $53,565; 1911, $75,325; 1912, $120,615. The large increase in the paper imports during 1912, as compared with previous years, is explained by the fact that this was the first year under the new regime. The value of the imports in 1912 was apportioned among the several countries furnishing the supply as follows: France, $60,685; Germany, $22,640; England, $8,503; Netherlands, $8,274; Spain, $7,921; Austria, $6,825; Belgium, $5,003; other countires, $764.

In general, paper of inferior quality is most in demand, but with the development of European enterprise, which is being gradually extended, it is not improbable that a market will be created for better qualities. With an almost inevitable increase of consumption, it seems that American manufacturers ought to find the possibilities of this market worthy of their consideration.

The relative importance of the various ports in respect to the paper trade is indicated by the following percentages calcualted in relation to the total paper imports for the year 1912: Tangier, 29; Casablanca, 26; Saffi, 13; Larache, 11.2; Rabat, 10.8; Mazagan, 4.2; Mogador, 4; Tetuan, 1.8. The position of Tangier and Casablanca as favorable points of entry for paper is evident. As to the relative importance of the two cities, especially in connection with the paper trade, it is worthy of notice that the total trade of Tangier (which port absorbs 29 per cent of the paper imports) amounted to but $5,000,000, as compared with $12,000,000 for Casablanca, while the latter port accounted for only 26 per cent of the total paper trade of the Empire. It will thus be seen that Tangier is the most important entrepôt for paper in Morocco, and it therefore appears that Tangier would be the most suitable point to select as a center of distribution for manufacturers of paper and stationery desiring to extend their trade in Morocco.

It is believed that the lines in which American competitors might be most likely at first to succeed would be in high-quality writing, typewriter, and blotting papers, as in these particular lines the superiority of British and American products is recognized by French manufacturers, an evidence of which may be found in the fact that papers of these classes manufactured in France are often watermarked with English descriptions such as "Oxford extra strong," "Crown blotting paper," "Medium typewriter," "Super royal," etc.

The best means of reaching dealers would be by the appointment of a reliable agent in Tangier, who should be supplied with a full collection of samples and prices c. i. f. Tangier and to whom every initial inducement should be made toward enlisting his interest in the creation of a demand for papers of American origin.

PORTUGUESE EAST AFRICA.

From Consul G. A. Chamberlain, Lourenco Marques.

The market for paper in the Province of Mozambique (Portuguese East Africa) is so small and the sources of supply so diversified that it certainly would not pay any individual firm to try to push sales at present. The total purchases, including every variety of paper, amounted in 1910 to $67,541, in 1911 to $73,661, and in 1912 to $95,418.

The following statement gives an approximate analysis of the purchases of paper in 1912. No exact information is to be had, as the customs do not differentiate between even the most diverse kinds of paper.

Printing paper, including news paper, imitation parchment, and tinted paper	$57,251
Writing paper, used also largely for book paper	18,130
Bond, ledger, linen, and book	954
Folded and flat foolscap	9,542
Kraft paper	1,908
Strawboard	1,900
Bristol board	1,916
Blotting paper	1,920
Tissue paper	954
Carbon paper	943
Total	95,418

There is no production of paper in the Province. As can be seen by the accompanying table, the sources of supply have shown no noticeable changes in the last three years. The duty on all paper is a flat rate of 3 per cent ad valorem. The shipping facilities from the United States are equal if not better than those from European ports.

As all the buyers are small and there is no local wholesale trade, credits are not asked for. Paper is generally bought for cash or, at most, on sight draft with shipping documents. Government departments are supplied by local dealers who are called upon to tender whenever there is an order of any importance.

Imports of paper into the Province of Mozambique in 1910, 1911, and 1912, and countries of origin, are given in the following table:

Countries of origin.	1910		1911		1912	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
United States	14,317	$2,571	21,298	$2,797	14,531	$2,856
Belgium	20,275	1,445	23,617	828	14,187	1,540
China	147	18	....	....	165	16
Egypt	110	18	425	143	383	85
France	11,189	3,286	9,407	3,920	7,906	3,758
Germany	174,546	11,939	121,556	11,238	172,585	15,133
United Kingdom	170,196	16,217	257,150	21,567	254,162	21,549
British possessions	93,537	9,378	63,091	5,516	117,268	15,942
Netherlands	4,303	213	1,635	915	2,827	137
Italy	413	40	154	14	1,100	428
Japan	....	....	374	96	44	10
Norway	572	12	7,614	238	19,298	430
Portugal, exports from	55,525	8,538	67,980	9,362	73,128	12,760
Portugal, reexports from	38,638	8,354	45,685	10,755	47,425	11,936
Portuguese possessions, reexports from	20,002	3,133	16,568	2,505	29,726	3,804
Rhodesia	13,145	1,220	4,695	1,392	7,262	1,551
Sweden	936	50	682	29	8,474	183
Switzerland	33	18	128	34	253	122
Transvaal	2,849	937	8,699	2,262	15,046	4,872
Other countries	1,666	154	95	50	710	356
Total	622,399	67,541	650,853	73,661	786,480	97,418

PORTUGUESE WEST AFRICA.

From Vice Consul Harry A. McBride, Boma, Kongo.

The Portuguese colony of Angola offers a more promising market for paper than Kongo. There are several weekly newspapers—about eight in all—and a considerable amount of job printing is done. The stock used by the newspapers is medium-grade print 16 by 24 or 21 by 32 inches in size. Colored print for handbills is also used extensively and cheap letterhead stock, usually lightly ruled, 8½ by 10½ inches, with cheap envelopes in dark colors or cross-lined on the inside, 4¾ by 6 inches.

There is also a small market in Angola, especially in Loanda, for fine stationery. American bonds, linens, and onionskin papers, in light tints, with envelopes to match, are practically unknown, but there are several firms who would use this grade of paper if it were on the market.

Correspondence should be in Portuguese or Spanish. Prices may be quoted in American currency, as the Portuguese milreis or escudo is of almost the same value, but it is recommended that the freight per ream or package from New York to Loanda be stated, as is always done in quotations from other foreign manufacturers.

The paper used in Angola is imported at present from Portugal, Germany, France, and the United Kingdom. The value of imports into the colony in 1908 was $31,605; in 1909, $42,977; and in 1910, $44,686. Of the total importation in 1908, $20,473 worth came from Portugal; in 1909, $24,265; and in 1910, $24,978. This apparently large precentage of imports from Portugal does not, however, signify that the merchandise was of Portuguese manufacture. As goods are often transshipped at Lisbon for Angola, and arrive in Portuguese vessels, such imports are classed as originating in Portugal.

SIERRA LEONE.

From Consul William J. Yerby.

As yet, West Africa is a poor market for the various classes of paper. The largest consumers, and thereby the largest purchasers, are the colonial printing offices. They buy practically all of their paper, of every class, on their respective home markets. The British West African colonies buy, as a rule, through the Crown agents at London.

There are a few native print shops and newspapers, but their imports are comparatively small, and consist mostly of light book and poster paper. The traders use very little paper for wrapping purposes, selling, as a rule, their goods in the wrappings in which they are imported, or without wrappings. However, such wrapping papers as are imported are of the ordinary brown, manila or bogus manila. Practically no wall paper is imported, the climate being against its use. In addition to light book and poster paper, the small print shops and traders import in small quantities different classes of papers for commercial, educational, and social purposes, usually of a medium good quality, and much of it with printed headings and forms to be filled in.

All large importing houses import such paper as is in demand, except printers' supplies. But papers, as most other imports, are purchased through the European offices or agents at Liverpool, London, Hamburg, Paris, etc.

Sierra Leone imported books and stationery in 1911 to the value of $33,160, in 1912, $35,467; and Nigeria, in 1911, stationery valued at $137,932, and in 1912, $182,080. Other statistics are not available.

UNION OF SOUTH AFRICA.

CAPE TOWN.

From Vice Consul Wm. A. Haygood.

The annual importations of paper of all classes into the Union of South Africa average $1.50 per capita, for every civilized man, woman, and child in the country. About 80 per cent of this population (roughly, 1,200,000) is European or white and the remainder (about 300,000) civilized colored people. The aggregate annual imports into the Union amount, in round numbers, to $2,250,000. The imports cover five general classes, namely, paper bags, hanging or wall paper, printing paper, wrapping paper, and writing and toilet paper. The following table shows the different classes of paper, the principal countries of origin, and the value of imports:

Classes of paper and countries of origin.	1912	1913	Classes of paper and countries of origin.	1912	1913
Paper bags:			Printing Paper:		
United Kingdom	$145,050	$165,583	United Kingdom	$537,057	$440,063
United States	29,316	25,471	Canada	249,938	258,805
All other countries	4,327	5,173	Belgium	28,493	31,491
			Germany	52,685	65,936
Total	178,693	196,227	Norway	54	25,665
			Russia	22,745	10
Hanging or wall paper:			Sweden	336	53,415
United Kingdom	164,750	177,418	Switzerland	36,892	2,827
Belgium	2,715	3,397	United States	6,112	6,740
Germany	18,001	15,310	All other countries	5,900	8,362
United States	4,278	2,156			
All other countries	1,027	735	Total	940,212	893,314
Total	190,771	199,016			

Classes of paper and countries of origin.	1912	1913	Classes of paper and countries of origin.	1912	1913
Wrapping paper:			Writing and toilet paper:		
United Kingdom	$59,803	$59,590	United Kingdom	$499,094	$497,702
Belgium	15,285	19,334	Austria-Hungary	9,738	4,896
Germany	73,435	70,131	Germany	37,603	28,712
Norway	44,372	65,615	United States	31,598	22,950
Russia	118,553	131,232	All other countries	13,747	9,859
United States	10,152	891			
All other countries	25,366	21,600	Total	591,780	564,119
Total	346,966	368,393			

Statistics showing countries importing the above classes of paper for 1914 are not available, but the total values of imports for this period are as follows: Paper bags $176,255; hanging or wall paper, $132,144; printing paper, $960,345; wrapping paper, $306,764. There are no data available as to 1914 import values of writing and toilet paper.

As will be seen from the table above, the United Kingdom and Canada supplied 60 per cent of the total imports. If wrapping paper be not taken into account, the United Kingdom and Canada supplied 80 per cent. Russia was the largest supplier of wrapping paper, having furnished between 30 and 40 per cent of the imports, Germany, United Kingdom, Norway, Belgium, and the United States contributing toward the remainder in the order named.

MARKET REQUIREMENTS.

The paper bags in general use in this country are of a low grade. The United Kingdom practically monopolizes this trade, of which it secures about 83 per cent. The United States is the only important competitor, supplying about 16 per cent of the total imports. The amount supplied by other countries is insignificant. The sizes most in demand are those used in the United States in fruit stores and retail groceries.

The patterns and stock of American wall paper are both acceptable to the South African consumer, but both householders and paper hangers have been trained to consider the widths and lengths of the rolls, so long used by English and German manufacturers, namely, 21 inches wide by 12 yards long, as being the only correct sizes. Close observation and interviews with wall-paper dealers, extending over a period of 10 years, compels the admission that American manufacturers cannot hope to secure any considerable proportion of this trade in South Africa unless they are prepared to adopt the standard width (21 inches) and length (12 yards), which has long been considered essential by colonials of English or German extraction, and especially so by the dealer and the paper hanger. It is admitted by dealers that the wall-paper trade of the whole of South Africa may not appear sufficient to justify American manufacturers in making the necessary alterations in their machinery to produce wall paper of the dimensions required, but it is claimed that the same causes operate against the sale of American wall paper in all British colonies, and that the aggregate trade to be gained will make it well worth the while of American manufacturers to consider the wishes of the consumer as well as the ingrained prejudice of the British workman.

Importers, when interviewed on this subject, have expressed surprise that "a country which captured so large a share of the tool trade of the world, by making the tools desired by prospective customers, instead of trying to force the sale of those not wanted, should not meet the demands of so large a proportion of wall-paper users in the matter of the width and length of rolls."

About one-half of the printing paper imported into South Africa is supplied by the United Kingdom, Canada coming next with something over 30 per cent. It is said that the bulk of this trade is in the hands of the International Paper Co. There is just at present very little chance for the supply of American printing paper for newspaper purposes, the publishers being determined to give British manufacturers and merchants the preference, regardless of price. To a considerable extent the same influences operate similarly in the case of job printers.

WRAPPING PAPER.

It will be seen from the above statistics that the United Kingdom failed to take the lead with regard to wrapping paper, having supplied only about 15 per cent of the total imports into the Union of South Africa. Russia, Germany, Norway, and Belgium supplied, in the aggregate, $250,643 worth of wrapping paper, while the United States, which furnished this article to the value of $10,152 in 1912 fell to $891 during 1913. As with paper bags, the class of wrapping paper used in this country is generally of low or medium grades. Brown, brown rope, colored tissue and semitissue are to be found in most of the stores and retail shops. One important importer claimed that the wrapping paper credited to Germany was really of Scandinavian origin, but had been bought "in transit" through German export houses. In the present circumstances there seems very little doubt that the trade of the United States with this country in wrapping paper could be very greatly increased. It is of utmost importance, however, that representatives undertaking to extend this trade shall be thoroughly familiar with business conditions in South Africa, the habits of thought, and methods of doing business peculiar to the two dissimilar dominant white races in control of practically the entire trade of the country.

The United Kingdom maintained its lead in the supply of writing and toilet paper, having furnished over 80 per cent. It will be seen that Germany and the United States combined secured only about 12 per cent of these imports. No separate statistics are available showing what proportion of these imports are to be credited to writing paper and to toilet paper, respectively. With regard to the former, a gentleman experienced in the trade said that the same conditions with regard to styles, sizes, wieghts, etc., which prevail in England obtain throughout South Africa, and added that American manufacturers, who were familiar with this trade as carried on in the United Kingdom, would be in possession of all the information necessary to enable them to consider intelligently the matter of entering this market in competition with English merchants and manufacturers. As to the quality of writing paper in use for social and commercial purposes, it may be considered good medium. The banks and wholesale houses generally use the class of paper known as "bank bond."

The bulk of the toilet paper brought into the market is made in England. Germany ranks next in the amount supplied. By far the greater part of this paper is sold in rolls. The classes of toilet paper most in demand are very cheap and of medium grades. A few only of the larger office buildings and good hotels are supplied with a better grade.

Outside of newspapers, magazines, trade journals, and government publications there is very little demand for such types of paper as are used in publishing houses in the printing of books. The demand for art papers is small.

There are a few small trunk factories in South Africa which use limited quantities of paper boards in the making up of suit cases and cheap trunks.

There is a limited demand all through South Africa for oiled and wax papers, principally for the use of dairymen and retail grocers.

TERMS AFFECTING TRADE.

The usual method of quoting prices is per pound or per ream, according to the class of paper being dealt with. The larger importers considered the terms on which they purchase paper as a private matter and were unwilling to supply information. The smaller importers are generally allowed 90 days from the date of acceptance of drafts with ship's documents attached, the latter being usually turned over at the time of acceptance.

The preferential tariff allowing paper of British origin a rebate of 3 per cent ad valorem, whether such rebate be the whole or only the part of the duty on any particular class of paper, undoubtedly operates in favor of the British manufacturer. The fact that the American manufacturer is dependent upon foreign "bottoms" to carry his goods to oversea markets, at rates fixed in London, is also a manifest handicap, especially in view of the "preference" above stated.

Notwithstanding the above-mentioned hindrances, there seems to be no good reason why the United States should not secure a very much larger share of the paper trade in the Union of South Africa. The statistics show that it has been able to make a fair beginning in the supply of paper bags.

If American manufacturers will adopt for their British colonial trade the standard sizes of wall paper, as explained, there is very little reason to doubt that it may share very largely in this trade. As to printing paper, American manufacturers, who are acquainted with the conditions that enable Canada to supply more than one-fourth of this class of paper for consumption in the Union of South Africa, will be enabled to judge whether this trade may not also be capable of definite extension. With a return of normal conditions, especially in view of the dislocation of the markets heretofore supplying wrapping paper, there seems every reason to believe that the United States will be in a position to secure a largely increased trade in this class of paper. Under similar circumstances, the trade of the United States with this country in writing and toilet paper is capable of marked expansion, if the trade be sought through channels with which importers are familiar.

JOHANNESBURG.

From Consul Edwin N. Gunsaulus.

So far as the needs of this consular district are concerned, common news paper is much the greatest in demand. It is imported for the most part in reels of 39 by 19½ inches to the extent of over 100,000 pounds per month for use of Johannesburg newspapers alone, this being at an average price of $68 per ton. This paper is imported almost entirely from Canada. From the best information at hand it is learned that the approximate consumption of reel news paper in Johannesburg amounts to 5,500 tons per annum. While anything like exact figures are not obtainable concerning the value of the imports or consumption of other papers brought into the Transvaal, the value is thought to be in the neighborhood of $80,000 per annum.

The kinds of papers mostly in demand, coming largely from the United Kingdom and continental Europe, are as follows: Printing paper, book paper, bank and bond paper, writing paper, imitation parchments, cover paper, envelopes, cardboards, news paper, wrapping paper, manila papers, wall paper, tissue paper, blotting paper, cloth-lined paper, carbon paper, boards, cloth-lined boards, and straw boards.

Paper in general use for social and commercial correspondence is of a very high class and in many instances has even been specially imported.

NO HOME PRODUCTION.

There are no paper mills in the Johannesburg consular district, which comprises the Transvaal, Orange Free State, and Rhodesia. It is stated that there is a movement on foot by the civic association of Pretoria to establish a plant for the manufacture of a coarse, brown wrapping paper, the material to be utilized being a local wild grass which grows in considerable profusion, but no definite statement can be made now concerning this proposed enterprise.

Three English manufacturers of paper have branch houses in Johannesburg, all of which carry very large stocks of almost every class of paper.

WHOLESALE PRICES OF IMPORTED PAPER.

Following are the wholesale prices of various kinds of paper now obtaining in this market:

Printing paper, supercalendered, 8 cents per pound; glazed, tinted, double demy, 36 pounds, $2 per ream.

Book paper, hand-makes, imitation hand-makes, cream wove and azure laid, also azure-laid ledger paper, 8 cents per pound.

Writing paper, cream laid, 8 cents per pound.

Imitation parchment, unglazed and glazed, bale lots, extra coated, $1; double demy, bale lots, $1.64 (this line is very much out in price).

Cover papers, glazed, medium, 40 pounds, $3 per ream; double brown, 60 pounds, $4 per ream; geranium red, $3 per ream; unglazed, medium, 40 pounds, $4.50 per ream.

Envelopes, commercial size, cream laid, $1 per 1,000; vellum, $1 per 1,000; woves, tinted and azure, $2 to $3 per $1,000; foolscap in cartridge, $2 to $3 per 1,000; foolscap, manila, $2 to $2.67 per 1,000; brief, manila, $5 per 1,000; .cream laid and blue, $0.79 to $1 per 1,000.

Cardboards, commercial, ivory and folding boards, colored, $2 per gross of 3 sheets and $3 per gross of 5 sheets; white, $3 per gross of 4 sheets and $4 per gross of 6 sheets.

News paper, average, $68 per ton.

Wrapping paper, 6 cents per pound.

Tissue paper, 12 cents per pound.

Blotting paper, 38 pounds demy, $4.86 per ream; 60 pounds, folding, $6 per ream (38 pounds mostly in demand).

Cloth-lined paper, $6 per gross.

Carbon paper, $10 upward (medium size is a good one and is mostly required).

Straw boards, $4 per hundredweight.

THE IMPORT TRADE.

There are no available figures showing the kinds or values of the imports of paper into this consular district by countries, the published figures being for the entire Union of South Africa. It can be said, however, that this consular district, particularly the Transvaal, in which are the populous cities of Johannesburg and Pretoria (the administrative capital of the union), is a very large purchaser of paper of all classes, affording much the best market to be found in all of South Africa. The total value of imports of paper of all sorts into the Union of South Africa for the year 1913 reached the sum of $1,656,805, of which paper bags constituted $195,740; hanging and wall paper, $199,016; printing paper, $893,315; and wrapping paper, $368,734. Of the total paper imports for the Union of South Africa the United Kingdom furnished $842,657 and the United States $35,257.

RHODESIA.

Following is a statement of paper imported into Rhodesia for the year 1913, with principal countries of origin:

Hanging and wall paper, $774, of which the United Kingdom supplied $715 and the United States $59.

Printing paper, $14,616, of which imports from the United Kingdom were $11,806; Canada, $1,377; Germany, $1,251; Belgium, $554; Sweden, $448.

Wrapping paper, $8,764, principal imports being the United Kingdom, $2,316; Norway, $1,449; Sweden, $3,577; Germany, $701; Belgium, $360.

Bags, $5,528, coming from the United Kingdom, $5,085, and the United States, $394.

Of the total paper imports into Rhodesia, amounting to $30,682, the United Kingdom supplied $19,992; Sweden, $4,064; Germany, $1,962; Norway, $1,636; Canada, $1,377; Belgium, $914; and the United States, $473.

It is considered by importers that there should be a more regular service of cargo ships from America to South Africa. If it were possible for ships to leave their ports at regular intervals and at strictly scheduled times, whether they have sufficient cargo or not, merchants would place more confidence in importing American articles of every description and, in consequence, would purchase on an increased scale. To establish a regular call at Cape Town or Durban, as is the case with the Union Castle Line from England, would be most advantageous.

Imported papers are mostly purchased through London agents, an allowance of 5 per cent being made against cash. It is a frequent practice to allow 60 days and even 90 days' time is sometimes given. The method of quoting is from samples produced by various travelers.

In the matter of the paper trade generally in this district the question of price is the important factor. The quality of the American product is in no way inferior to that with which it competes, but as long as the English and continental prices are lower it may reasonably be expected that European manufacturers will receive the bulk of this trade.

PORT ELIZABETH.

From Consul E. A. Wakefield.

Paper imports into this consular district are of importance. With the single exception of paper-bag imports, United States manufacturers do not appear to be able to participate in this trade.

Imports are subdivided for statistical purposes into four classes, viz, printing paper, with imports here amounting to $235,000; wall paper, $100,000; wrapping, $105,000; and paper bags, $65,000.

Imports under headings other than paper, but which are naturally included in such products, are as follows: Books, printed, $250,000; cardboard boxes, $20,000; playing cards, $7,000; maps and charts, $7,500; music, $12,500; printed matter (miscellaneous), $315,000; miscellaneous stationery, $505,000; and printer's and bookbinder's material, $43,000.

Wall-paper imports are 90 per cent British and the balance German. Fifty per cent of the printing paper is supplied by the United Kingdom, nearly 30 per cent by Canada, 7½ per cent by Germany, 6 per cent by Sweden, and about 3 per cent each by Norway and Belgium. In wrapping-paper imports Sweden leads, with less than 30 per cent, followed by Germany, Norway, and the United Kingdom, in the order named, but each with less than 20 per cent, Belgium over 5 per cent, and Canada not quite 3 per cent. Paper bags are nearly 87 per cent from the United Kingdom, with the balance from the United States. Sixty-five per cent of printer's and bookbinder's material is from the United Kingdom, about 10 per cent each from the Netherlands, Germany, and Sweden, and 5 per cent from America. Printed books, music, maps, and charts, and cardboard boxes come from England. Writing and toilet paper is 90 per cent British, 5 per cent German, and 4 per cent American. Printed matter is imported from the same countries and in almost similar proportions.

MARKET REQUIREMENTS.

While the total of paper imports is fairly large, it must be remembered that the seaport imports are for a greater territory than is included in the port consular districts and some of the imports landed here would not be market requirements from the standpoint of this district. For instance, the printing-paper imports for newspapers here are largely from a well-known Canadian paper mill located in Quebec. Local importers say that American printing paper of this class is one-half to three-fourths of a cent per pound higher. The upcountry demand for printing paper requires the English product.

The next grade used here is known as a supercalender costing 4 cents per pound and is usually imported in reams, the size of sheets being 30 by 40 inches of about 54 pounds weight.

A cover paper which is popular here for paper-covered books costs 3¾ cents per pound.

An imitation parchment much used here for notebooks, customs forms, and similar purposes is purchased by the ream, weighing 19 pounds, sheets 20 by 30 inches, and the f. o. b. price in England is 91 cents per ream.

An art paper for catalogues, etc., costs 5¼ cents per pound f. o. b. Another for job printing costs 4 cents per pound f. o. b.; another, 5 cents per pound. What is known as ordinary printing for books sells for 14 cents per pound.

The best bond paper used to any extent costs 18 cents per pound f. o. b. and also comes in reams, post or foolscap.

These are the principal types of paper used by the newspapers and printing establishments here.

A better class paper bag will be used here in the future than has ever been used in the past. In fact, the grade has been gradually improving for some time.

Most paper bags in the past have been of an inferior quality.

Importers declare that American makers can not equal the local wholesale price of 6½ cents per pound, less 5 per cent, and 8¾ cents per pound net, landed here. Prices are the same per pound for all sizes in these bags.

Two of the best sellers of wrapping paper for the dry-goods trade or similar purposes are known as mill-glazed drapers cap, 20 by 30 inches, and costs $53.14 per ton, packed in 30-ream bales. Another quality, same size sheets, costs $56.60 per ton. Presumably there are discounts with the prices quoted, but they are not given. These prices are f. o. b. continental ports.

The trade in correspondence paper is almost wholly in British hands. Prices obtained here are sufficiently high to apparently make it possible for America to secure a portion of the trade.

Nearly all toilet paper used here at present is exported from the United Kingdom, although probably not all of British manufacture. The exact amount of imports from various countries is unobtainable, as toilet paper is statistically classified under stationery as "Writing paper, toilet paper, etc." of which about 85 per cent is from the United Kingdom. The highest grade article in this line here is an American product sold in two sizes at 50 cents and 62 cents per package for which there is a very fair market, price being considered. The great bulk of toilet paper consumed here is roll paper, retailing at 18 and 25 cents per roll. Since all towns of any size have a variety of clubs, hotels, etc., this is not only a good field for the sale of toilet paper, but sanitary towels and paper drinking cups are in demand.

TRADE PROSPECTS.

On several occasions during the past two years reports have been forwarded from this office covering certain specific lines in the paper trade in response to requests from American manufacturers or dealers.

A number of local importers have been in correspondence with American firms as a result. It seems to be wholly a matter of price and the American product in general is said to be more expensive than the European article.

One mistake made by American manufacturers quite frequently is the insistence of a large initial order. This country has but a small population, and trial orders for any considerable quantity of any product should not be expected.

SOUTH AFRICAN TARIFF ON PAPER.

The following lines are dutiable at 3 per cent ad valorem: All paper in its original mill ream wrapper or reels, not including feint or ruled papers, blotting or wall papers, but including tissue papers; fancy paper for box covers, flint glazed; imitation parchment; brown; photographic mounting; drawing; cartridge; insulating; poster and surfaced paper; wrapping paper not printed on; manifold; grease proof; unglazed typewriting, stereo backing; stereo tissue; binders'; all the above to be not less than 16 by 15 inches in size.

The following lines are dutiable at 20 per cent: Paper bags, not printed on; blotting; cigarette, printed on; embossed, for impressing name of manufacturer on confectionery; feint; fruit wrapping, printed on; gummed; linen-backed; ruled; metallic; packing, printed on; napkins; stereo blotting; toilet; wrapping, printed on; printed records for electrical meters; wall paper; cartridge, printed on, for wrapping explosives; fly, printed on or otherwise.

The lines dutiable at 25 per cent are as follows: Paper bags, printed; billhead paper.

Imports from Great Britain and Canada are entitled to a reduction of the duty of 3 per cent ad valorem.

ZANZIBAR.

From Consul Perry C. Hays.

In considering Zanzibar as a market for the sale of paper of various kinds, it should be borne in mind that the entire population of the protectorate does not exceed 245,000 souls, and that the city of Zanzibar is the only town of any importance, so far as a considerable demand for European goods is concerned. In this population the Europeans do not number more than 250, the Arabs 10,000, and the Hindoos 20,000. From this it is evident that the number of purchasers of paper is not great, and conditions are such as to preclude the probability of a considerable increase in the users of this product as the years pass.

No kind of paper is manufactured in the archipelago, and the importations of it are so relatively limited as not to justify their being given a separate classification in the official trade returns. The result is that no figures can be had showing the quantity and value of the paper imported into the islands.

The principal kinds of paper used in Zanzibar are carbon paper, bank book, book, bill, foolscap, news, strawboard, typewriting, wrapping (including paper sacks), and writing paper.

The writing paper used is of a medium grade and is sold in tablets of 100 sheets, which measure 8 by 10 inches. The prevailing colors are white and blue tint. The tablets sell at the rate of $13.38 per gross. For business uses many of the Indian firms make use of typewriting paper by having headings printed on the sheets.

With the exception of some carbon paper, which is imported from America through London houses, and a negligible quantity of a few kinds brought in from Bombay, the various grades of paper are imported from Europe on a credit of 90 days or with a discount of 2½ per cent on cash payments.

It should be borne in mind that a people of limited purchasing power prefer the cheaper kinds of paper. The Indian, who is the dominant economic element in Zanzibar, is always ready to turn to a field that offers better bargains, so there is every encouragement within the needs of the market for the American exporter to promote his trade in paper in Zanzibar.

OCEANIA.

AUSTRALIA.

MELBOURNE.

From Consul William C. Magelssen.

Generally speaking, quality for quality, prices of American papers are higher than those of the Continent and Great Britain. Also, the American market fluctuates to a far greater extent than in the other countries from which Australia draws her supplies. Local merchants inform me that it is quite a usual thing to introduce and establish a paper, and merchants run on same for a term and build up a good trade, when suddenly the American mills will advance their prices anywhere from 5 to 33⅓ per cent. This uncertainty of our market tends to give the merchant an uneasy feeling in establishing business in American lines, and must be held largely responsible for the minor share of the trade enjoyed by American paper manufacturers in these parts. While the prices of English and continental papers do fluctuate, the advance is not so heavy as with us, usually 2½ per cent at a time; 5 per cent would be considered a very big increase. Another point to be observed in this connection is that nearly all Australian paper-distributing houses are branches of English warehouses and mills, the balance have offices in London. In buying, naturally these English houses give a preference to their own productions.

On the following pages I have set out the kinds of paper for which Australia offers a market.

PRINTING PAPER REQUIREMENTS.

News printing paper.—This is a cheap grade of paper used for printing newspapers, and many cheap productions. It is imported in rolls of various widths for newspapers having rotary machines, and also in sheets of various sizes and substances for the country newspapers using ordinary presses of the Wharfedale type. The standard dimension for rolls of recognized widths is 24 by 36 inches, 30 to 32 pounds per 500 sheets, and for sheets 24 by 36 inches, 30 to 37 pounds per 500 sheets. It is stocked in the following sizes: 22½ by 35, 24 by 36, 25 by 36, 27 by 41, 27 by 43½, 28 by 44, 25 by 40, 30 by 40, 35 by 45, and 36 by 50 inches. The sources of supply are Norway, Sweden, England, Canada, and America.

A good percentage of the trade is held by America, as the quality is popular, being a good bulking, strong, and evenly finished paper, which characteristics are necessary for fast-running rotary presses. Canada also has a fair share of this market, their product being somewhat similar to the American and at about the same figure. England also holds a share of the business, but not to the same extent as Canada and America. Norway and Sweden hold the cheaper portion of the business, as their paper is lower in price, but has not the appearance and regularity in "making." The larger users of news usually split up their contracts between two or even three countries, so that they are protected in the event of fires, strikes, wars, etc., breaking out in any particular quarter and operating against their regular shipments.

Contracts with leading newspapers vary in size from 1,000 tons per annum upwards and spread over a term of from one to three years. Contracts are frequently running from more than one supplier at the same time; that is, supplies may be drawn from England, Scandinavia, and Canada by one newspaper. It is customary in large contracts with newspapers to provide for sellers to hold a reserve supply in store here to meet possible delay in arrivals. It is usually arranged that the newspaper takes delivery on this reserve supply on arrival and pays for it as used, or if not previously used, it is taken as the final delivery under the contract. With some newspapers this reserve stock has to be stored by the seller at his expense in store approved by buyer. The terms are fully specified by each newspaper when calling for tenders.

Mill-finished printings.—There are several qualities used. The lowest grade imported has a fairly large sale. This grade is not offered by America, but is supplied by England and the Continent. The next quality is one on which at one time the American mills practically had a monopoly, the advantages of their papers being their particularly good bulking qualities, even finish, and case packing. There is still a very large consumption of this quality, but owing to the steady increases in the price of the American the business has gone elsewhere, principally to England, whose paper, however, is somewhat different in character and does not bulk as well, but the lower price at which it can be sold enables the buyer to pay the difference for the extra poundage to obtain the comparative bulk. The English paper is bale packed, but in consideration of the lower freight for bales from English ports and the fact of this class of paper being a very cut line, buyers take into consideration every fraction they can save, and therefore forego the advantage of case packing.

There is also a moderate demand for an esparto printing, which is obtained from England and Scotland. America does not seem to be able to approach this grade in price.

White glazed printings.—This heading applies to cheap glazed papers, as used for low-grade magazine productions, illustrated papers, etc. This paper is principally supplied from the Continent, and is used very extensively. A competitive line is not offered by America.

Supercalendered printings.—There is also a good demand for this class of printing. The business was almost exclusively held by America until the introduction of a continental make, which, while very good in some respects, lacks the bulk and handling of the American production, but the vast difference in price made it marketable, and the steady increase in price of the American has allowed the continental grades to obtain a very firm hold.

Art and imitation art paper.—The demand for this class of paper is considerable, and the sources of supply are England and Scotland

and of recent years the Continent. In the better qualities the English and Scotch is preferred, but in the lower grades the Germans practically hold the market although efforts are made from time to time by the British mills to capture the business. The American product in this class of paper is practically unknown here.

Litho papers.—It is a difficult matter to really define a litho paper, as almost any paper can be used for this purpose, according to the "job"; but what is principally used for lithographing in a number of colors and varnishings, such as jam labels, posters, etc., is what is known as a mill-glazed litho paper. This paper is made in England, and on the Continent. America does not show a competitive sample of this line. For other litho work qualities of the American mill-finished and supercalendered printings excel and for higher grade work again the first grade British mill-finished printings are used.

Antique and featherweight printings.—There is a large consumption of this paper, which is used for the production of various books, such as novels, technical works, etc., the cheaper grades of which are principally supplied by the Continent and the better grades by England. America shows samples of this line, chiefly in qualities too good for the wants of this market. Her cheaper grades, however, do not compare in price, quality for quality, with the Continent or England.

Cover papers.—In catering for this market in this class of paper the principal factor is cheapness, and while the American mills manufacture cover papers to a large extent that can not be approached for variety, quality, and novelty, yet their price is the barrier. It is of little use to submit samples, as the lines are continually changing, and it is about the only line in which fashion plays a part. It is not to be inferred that no good qualities are bought, but the demand is so limited that it is not worth while recording. The business chiefly goes to English and Continental mills, as they cater more for the lower grades.

Surface papers.—This heading includes flints and friction-glazed, enameled papers, etc. These lines find a regular sale, but are supplied principally from the Continent and England. Although America makes some papers of this description she has not yet been able to compete with the aforementioned countries either for price or quality.

WRITING PAPERS.

Cream engine-sized writings.—Although there are several qualities used, Scotland practically supplies this market.

Tinted engine-sized writings.—This is carried in a number of standard light shades at the recognized increase of cost for tints.

Tub-sized writings.—This quality is also used to some extent, but the above grade answers most requirements.

Bank or onionskin writings.—Large quantities of this line are used and obtained principally from the Continent and England. This paper is delivered in warehouse at prices up to 2s. ($0.48) per ream of La Post, 10½ to 11 pounds per 480 sheets. America has not yet been able to compete with this grade.

Tinted bank writings.—This is a paper of the same quality as the above, only supplied in the various regular tints. The same remarks apply, with the exception of price, which carries the usual increase for colors.

Linen-faced bank writings.—The call here is for the cheaper qualities of this grade and is used for manufacturing purposes. It is supplied from the Continent and England.

Bond writing papers.—This is the next grade which is used largely, and in this quality the American mills are well represented. The next quality used here is what is known locally as "extra strong" grade. There is a fair demand for this paper, which is supplied principally by England and Scotland.

Book writing papers.—This paper is used mostly for account-book work. The demand is large, and America had a good share of the business until they put their price up to such an extent that buyers were driven to England, which still holds the business.

Handmade writing papers.—This line is also used, but one or two proprietary lines of English origin practically hold the market. Apart from the above-mentioned qualities there are a few odd lines imported, of which America has a share.

Gummed papers.—These are used largely here and are purchased from England and Scotland.

Blotting.—There are many grades of this paper imported, of which the American market will be familiar, they holding a good share of the business.

Pasteboards.—This line has a very large sale, and America holds practically 75 per cent of the business, the balance going to England.

WRAPPING PAPERS.

Kraft brown and sealings, glazed and unglazed wrappings.—These are largely used in this market for wrapping and bag-making purposes. These papers are imported in reels and sheets and are supplied almost exclusively from Norway and Sweden. During the past 12 months, however, Canada has been doing a fairly steady business, her product being of very good quality and slightly cheaper than the Scandinavian. The United States has lately been supplying this market with a quality similar to that which is being used here, but the prices are altogether out of the question. The cheaper grades, such as mill-glazed browns, sugar papers, etc., are made by the local mills, which are protected with a tariff of £5 ($24.33) per ton in addition to freight and importing charges. The American wrapping business apparently is quite different from this market, as their manila, bogus manila, etc., are quite unsuitable, kraft being preferred and much lower in price.

Caps, tissues, and apple wrapping.—These papers are exclusively supplied by the Continent and are largely used. America has not yet submitted lines which can successfully compete.

Waxed wrapping papers.—This is a line which is regularly stocked, but not in large quantities, the chief source of supply being England. American mills produce a quality above the requirements, but do not show the lower grades.

Carbon papers.—Naturally this is used to a great extent, the business being divided, but American mills have a fair share.

BOARDS OF VARIOUS KINDS.

Strawboards.—This is a line used to a very large extent, being imported from the Netherlands and Japan. The boards from the Netherlands are the best quality and used mostly. Japan supplies the second quality. What might be termed the "third quality" is produced by the local mills. America does not offer this line here.

Leather boards.—This grade is used here very largely in the box-making industry, and supplies are wholly drawn from the Continent.

Millboards.—England supplies practically the whole of this market.

Manila boards.—Under this heading can be classed tag manila, lined manila, coated manila, etc. Fair quantities of these boards are used, and in tag manila America practically commands the market. In lined and coated manila the trade is divided between America and the Continent.

Carpet felt.—This is manufactured by the local mil's.

True vegetable parchment.—This business is exclusively held by the Continent. Although American mills manufacture this grade, their prices are very much higher, quality for quality, than the Continental.

DOMESTIC PAPER PRODUCTION.

There are four paper mills in Victoria; they produce printing, blottings, cartridges, browns, krafts, strawboards, and pulp boards. The output from these mills amounts to about 250 tons per week. Exports from this district are practically nil.

The raw materials used are rags, at about £14 ($68.13) per ton; bagging, at £2 10s. ($12.16) per ton; rope, at £8 ($38.93) per ton; wood pulp, at from £9 ($43.79) to £15 ($72.99) per ton; and straw, from £1 10s. ($7.29) to £2 ($9.73) per ton. With the exception of straw, most of the raw material is foreign to Australia. The qualities of papers and boards manufactured are of fair medium grade.

The machinery in use is wholly British, with the exception of the strawboard mill, the machinery for which was supplied from Ohio.

The wages of employees are governed by wages boards and range from the laborer at 8s. ($1.94) per day of 8 hours to 12s. ($2.92) per day of 8 hours to machine and beater men.

The following are the wholesale prices in Australia, the imported and the locally manufactured products selling at about the same prices: Brown paper, from $72.99 to $97.33 per ton; blotting paper, $170.32 per ton; printing paper, from $116.79 to $136.26 per ton; cartridge papers, from $126.52 to $136.26 per ton; strawboard, from $36.49 to $41.36 per ton; pulp boards, from $58.39 to $68.13 per ton.

I am unable to furnish a statement showing the quantity of paper imported into the Melbourne consular district, but I have prepared a table showing the total value of the principal lines and the share of the United States in the trade. The statement follows:

Articles.	Total imports for district.	Imports from the United States.
Apple wrapping	$5,927	....
Bags (not printed)	20,128	$37,165
Blotting	33,491	10,375
Boards, coated, n. e. i.	37,939	10,010
Cardboard and pasteboard	92,565	67,566
Cartridge	21,656	....
Gummed, n. e. i.	12,895	540
Millboard, gray board, leather board, manila board, and wood board	90,589	65,537
Paper felt, or carpet felt paper for the manufacturing of roofing felt	2,010	667
Paper hangings	202,528	22,425
Parchment, true vegetable	8,434	....
Printing	2,084,014	735,401
Strawboard	61,201	14
Wrapping of all colors, glazed unglazed, or mill glazed, browns, caps not elsewhere specified, casings, sealings, nature or ocher brown, sulphites, sugars, and all other bag papers, candle carton papers	$445,561	$6,647
Writing and typewriting, plain, in sheets not less than 16 by 13 inches	793,817	94,507
Cover paper, pressings	85,086	20,351
Other (5 per cent)	55,234	45,477
Other (free)	411,899	73.162
Total	4,464,974	1,189,844

The standard sizes, weights, shades, etc., are essentially British and not in keeping with the American. However, I am told by the trade that this is well known to American mills, and does not make any material difference, as most of the orders placed are for "making" quantities, and therefore the mills conform to the Australian standard.

The trend of the import trade is to England and the Continent, for the reason that they are catering more exclusively to the wants of this market, and that their prices are reasonably firm. American mills have an advantage in ocean freight, inasmuch as their cased freight is cheaper than British or continental. On the other hand, paper packed in bales is considerably cheaper from the Continent; British freights for bales are about the same as American. There is further a preferential tariff on some lines. If a preferential tariff on all British goods, which is being quietly but earnestly advocated, comes into effect, it is likely that the Canadian mills would benefit to a very large extent.

The methods for quoting prices and terms vary considerably. Business is done at f. o. b., c. i. f., and delivered prices. Payment is made in some cases under letters of credit in London or New York, and drafts are drawn at sight and up to 90 days' sight. In other cases payment is made against delivery.

The Government departments buy all their requirements through local houses, which quote by tender, and hold the stocks to be called for when required.

CRITICISMS OF SHIPPING METHODS.

A prominent paper importer of Melbourne has been good enough to favor me with the following comments on the methods of American paper exporters with whom he has had dealings:

> On very many occasions it is the unpleasant experience of the importer to have a shipment of American goods arrive at the wharf before the bill of lading or the draft comes to hand, which naturally causes much annoyance, inconvenience, and extra expense. This could easily be remedied by watching the departure of the mails. It has the appearance that as long as the maker receives his money and the goods are exported—so far as he is concerned—that ends his worries. Invoices should always accompany the drafts.

The export markings are very often not sufficiently distinct, cases are frequently addressed in large letters from the mills to some export agent in New York or other center, but the address for the final destination is pushed away in some corner where it can scarcely be seen. This necessitates loss of time in endeavoring to locate the goods.

The cases as a rule are strongly made, but they should not be asked to carry a heavier weight than 5 hundredweight, especially for shipping purposes. When containing more than their complement, the boards are liable to spring and become loose, thus causing damage to the paper.

The packing generally is in good order, but paper has been received at times just put loosely into the case, the reams not being parceled up securely, but just a slip of paper to indicate the division. When these cases are handled there is a sagging and buckling of the paper causing much damage.

The specifications are not often received in a complete form, the measurements and contents of each case are seldom shown, neither the total measurement of the shipment given.

The rate of freight per ton is frequently not stated; all that is shown is the total amount of the shipment. The ton rate should be given, as this is needed for checking and costing purposes.

These mentioned pin pricks are very irritating and vexatious, but they are infinitesimal in comparison with one point, which in the near future will be a great stumblingblock to the expansion of the American paper trade with Australia. Even at the present time the cause is beginning to make itself manifest. A sample of paper is forwarded to the maker or to the agent on the strict understanding that it will be fully matched in all respects. The trouble is when the completed article arrives it is found to be inferior to the original sample.

Do the exporters imagine that the difference will not be noticed? Perchance a draft will not be accepted for some of these goods, then the agents will consider they have been badly treated, but not until it is fully understood that the goods are to be the same as the original sample will there be any appreciable increase in the trade. It does not necessarily follow that this method is resorted to by all the agents, but as surely as it is practiced by one, so will it have a damaging effect on the trade as a whole.

It will be understood that what I have written in connection with the paper business is as if prior to the war. Conditions have altered considerably, inasmuch as the Continent is practically cut off, leaving only England and America to supply the market. Whereas American grades before were comparatively high in price, they will now be used to a large extent, and this should be a great opportunity for our manufacturers to get a much better footing than they have ever had before in Australia.

I would again emphasize the necessity and advisability of quoting firmly and to reasonably hold to prices, and not to feel the pulse as to how much it is possible to obtain. Such points will assist in establishing a feeling of confidence greater than that which exists to-day.

NEW SOUTH WALES.

From Consul General John P. Bray, Sydney.

I transmit the following statistics of imports of paper into the Commonwealth of Australia for the year 1912:

Classes of paper and countries.	Value.	Classes of paper and countries.	Value.
Apple wrapping:		Bags (not printed):	
United Kingdom	$126	United Kingdom	$21,261
Germany	5,533	New Zealand	282
Norway	238	United States	37,165
Sweden	22,400	Other foreign countries	501
Total	28,297	Total	59,209

Classes of paper and countries.	Value.
Blotting paper:	
United Kingdom	$58,782
Other British countries	14
Germany	618
United States	10,375
Other foreign countries	822
Total	70,611
Boards, coated, n. e. i.:	
United Kingdom	27,562
Belgium	939
Germany	26,624
Norway	5,382
Sweden	1,878
United States	10,010
Other foreign countries	662
Total	73,057
Cardboard and pasteboard:	
United Kingdom	71,304
New Zealand	49
Belgium	2,798
Germany	32,420
Netherlands	720
Sweden	3,066
United States	67,566
Other foreign countries	803
Total	178,726
Cartridge paper:	
United Kingdom	33,126
Belgium	1,922
Germany	4,983
Norway	627
Other foreign countries	1,085
Total	41,743
Gummed, n. e. i.:	
United Kingdom	20,901
United States	540
Other foreign countries	413
Total	21,854
Manufactures of, framed (including the weight of the frame) or unframed, having advertisements thereon, including price lists, n. e. i., trade catalogues, n. e. i., show cards, n. e. i., and all printed, photographed, or lithographed matter, pictures, n. e. i., and posters of all kinds, used or intended to be used for advertising purposes; also all printed or embossed bags and cartons; calendars and almanacs, n. e. i.:	
Australia	720
United Kingdom	281,556
Canada	3,095
New Zealand	1,533
Straits Settlements	9
Other British countries	116
Belgium	4,419
France	6,112
Germany	36,245
Japan	1,470
Netherlands	4,058
Norway	695
Switzerland	3,469
United States	76,749
Other foreign countries	1,211
Total	421,457
Mill board, grey board, leather board, manila board, and wood board:	
United Kingdom	63,912
Canada	2,652
Austria-Hungary	9,888
Belgium	788
Germany	58,631
Japan	24
Netherlands	9,295
Mill board, etc.—Continued.	
Norway	$6,020
Russia	7,781
Sweden	66,593
Switzerland	2,336
United States	65,537
Total	293,457
Paper felt or carpet paper for the manufacture of roofing, felt, and like substances:	
United Kingdom	1,343
United States	667
Total	2,110
Paper hangings:	
United Kingdom	240,599
Canada	14,847
Other British countries	5
Belgium	136
France	1,825
Germany	14,867
Netherlands	457
Sweden	1,528
United States	22,425
Total	296,689
Parchment, true vegetable:	
United Kingdom	993
Belgium	3,864
Germany	15,645
Sweden	559
Other foreign countries	593
Total	21,654
Printing paper:	
United Kingdom	1,605,497
Canada	871,945
New Zealand	14
Austria-Hungary	39,219
Belgium	44,708
Germany	217,644
Japan	550
Netherlands	22,736
Norway	362,048
Sweden	510,646
United States	735,405
Other foreign countries	786
Total	4,411,198
Ruled and bordered: United Kingdom	24
Strawboard:	
United Kingdom	1,698
Austria-Hungary	764
Belgium	491
Germany	37,909
Japan	11,864
Netherlands	133,274
Norway	1,236
Sweden	2,365
United States	14
Total	189,615
Wrappings of all colors:	
United Kingdom	48,586
Other British countries	170
Belgium	44,733
France	939
Germany	190,796
Netherlands	16,658
Norway	209,172
Russia	4,837
Sweden	390,838
Switzerland	1,182
United States	6,647
Other foreign countries	832
Total	915,390

Classes of paper and countries.	Value.
Writing and typewriting (plain), in sheets not less than 16 by 13 inches:	
United Kingdom	$1,256,919
New Zealand	5
Straits Settlements	25
Austria-Hungary	8,492
Belgium	9,733
France	691
Germany	48,027
Netherlands	9,441
Norway	27,708
Spain	5,100
Sweden	22,541
United States	94,507
Other foreign countries	131
Total	1,483,320
N. e. i., including boards, n. e. i., lined or unlined, cover paper, pressings:	
United Kingdom	85,344
Canada	1,499
Other British countries	97
Total	86,940
N. e. i., including boards, lined or unlined:	
Austria-Hungary	890
Belgium	1,513
France	19,573
Germany	24,614
Netherlands	3,581
Norway	2,715
Sweden	3,299
United States	20,351
Other foreign countries	481
Total	77,017
Other, 5 per cent (general tariff); free (preferential tariff):	
United Kingdom	$72,549
Other British countries	19
Belgium	856
Germany	15,198
France	1,367
Sweden	963
United States	45,477
Other foreign countries	579
Total	137,008
Other, free:	
United Kingdom	168,663
Canada	10,064
Other British countries	24
Austria-Hungary	5,543
Belgium	56,685
France	11,027
Germany	235,344
Italy	228
Japan	4,282
Netherlands	2,248
Norway	41,345
Sweden	84,983
United States	73,163
Other foreign countries	564
Total	694,163

NEW SOUTH WALES IMPORTS.

New South Wales relies entirely upon imports for its supply of paper of all classes. The sources of supply for the many varieties required to satisfy the needs of a large community vary in accordance with conditions of production, facility of transport, and relative superiority of quality of manufacture. For example, it is shown by statistics that whereas the United Kingdom is easily first among the countries supplying printing paper, Sweden leads in wrapping paper, the United States in paper bags, and the Netherlands in millboard, gray board, etc. There is naturally a strong leaning toward commodities of British origin which materially influences all kinds of import business. When, however, a non-British source of supply proves its undoubted ability to meet the needs of the market more satisfactorily, there is always a good chance of its goods being purchased extensively. In stationery a great many local concerns have for years been doing business with British manufacturers in exclusively watermarked lines in which, as they say, they have "built up a standard" from which they hesitate to depart. In the heavier lines the influential factor is, in the main, cost price, with a corresponding quality, but here will be found far less competitive difficulty than in stationery and associated branches.

The United States, it will be observed, figures as only a small contributor to the total amount, which is probably due to the reasons above stated as well as to the fact that American manufacturers have not yet paid any concerted or particular attention to this field. During 1913 a representative of one large American factory visited this State and before leaving reported that he had succeeded in taking some very fair sample orders, but he complained of the prejudice in favor of already known lines. He was selling only high-class stationery and other expensive stock. He informed me that he expected to make a return visit in the near future.

It must be remembered that on all such paper as is dutiable under the Australian tariff act, an average preference of 5 per cent is allowed on imports from the United Kingdom. In a few cases the preference is even more, but this is only on very restricted lines, which in the aggregate affect the total but little.

The following table shows the value of imports of paper into New South Wales for 1913, by countries of import and countries of origin:

Classes of paper and countries.	Direct imports.	Country of origin.
Bags, n. e. i.:		
United Kingdom	$4,273	$4,272
United States	23,957	23,958
Other foreign countries	44	44
Total	28,274	28,274
Blotting:		
United Kingdom	25,359	21,344
British possessions	24	....
United States	6,078	10,069
Other foreign countries	701	749
Total	32,162	32,162
Wrappings of all colors (glazed, unglazed, or mill glazed), browns, caps, not elsewhere specified, etc.[1]:		
United Kingdom	27,534	26,040
British possessions	1,518	1,509
Belgium	21,545	14,264
Germany	95,704	53,138
Netherlands	7,432	10,487
Norway	47,073	58,364
Sweden	155,314	190,100
United States	5,622	6,662
Other foreign countries	588	1,766
Total	362,330	362,330
Cardboard and pasteboard:		
United Kingdom	32,591	29,554
British possessions	5	....
Germany	9,368	11,558
United States	12,969	15,203
Other foreign countries	4,711	3,328
Total	59,644	59,643
Cartridge:		
United Kingdom	15,544	15,408
Other foreign countries	1,533	1,669
Total	17,077	17,077
Coated boards, n. e. i.:		
United Kingdom	$12,040	$11,937
British possessions	24	....
Germany	11,802	9,812
Netherlands	3,937	5,611
United States	5,927	6,142
Other foreign countries	1,382	1,610
Total	35,112	35,112
Gummed, n. e. i.:		
United Kingdom	8,876	8,584
British possessions	24	....
Other foreign countries	564	881
Total	9,464	9,465
Manufactures of, framed or unframed, having advertisements thereon:[2]		
Australia	....	433
United Kingdom	178,727	170,400
British possessions	13,120	1,270
Germany	9,018	12,619
United States	39,681	54,462
Other foreign countries	4,112	5,474
Total	244,658	244,658
Millboard and gray board:		
United Kingdom	58,194	50,709
British possessions	526	652
Austria-Hungary	10,808	17,144
Belgium	5,002	1,056
Germany	49,376	35,935
Netherlands	5,742	7,101
Sweden	56,413	60,719
Russia	....	4,905
United States	23,666	30,119
Other foreign countries	453	1,840
Total	210,180	210,180

[1] Includes casings, sealings, nature or ocher browns, all other paper, candle carton paper.

[2] Includes price lists, n. e. i., trade catalogues, n. e. i., shoe cards, n. e. i., and all printed, photographed, or lithographed matter; pictures, n. e. i., and posters of all kinds, used or intended to be used for advertising purposes; also all printed bags and cartons; calendars and almanacs, n. e. i.

Classes of paper and countries.	Direct imports.	Country of origin.
Other 5 per cent (general), free (preference):		
United Kingdom	$38,446	$34,339
British possessions	599	5
Germany	4,530	5,091
United States	14,878	19,023
Other foreign countries	730	725
Total	59,183	59,183
Paper hangings:		
United Kingdom	75,099	72,813
British possessions	2,199	2,199
Germany	2,974	3,567
United States	2,059	3,664
Other foreign countries	258	346
Total	82,589	82,589
Printing:		
United Kingdom	1,251,445	760,829
British possessions	301,864	393,953
Belgium	37,935	16,847
Germany	98,755	82,540
Netherlands	4,876	4,828
Norway	252,757	263,847
Sweden	164,648	179,837
United States	76,774	473,199
Other foreign countries	1,684	14,858
Total	2,190,738	2,190,738
Strawboard:		
United Kingdom	233	53
Belgium	2,983	740
Germany	14,434	9,480
Japan	7,213	7,213
Netherlands	26,367	33,744
Total	51,230	51,230
Writing and typewriting (plain), not less than 16 by 13 inches:		
United Kingdom	$508,993	$495,847
Belgium	5,654	1,933
Germany	23,135	18,829
Norway	4,857	10,468
Sweden	11,699	13,807
United States	54,233	64,169
Other foreign countries	1,708	5,586
Total	610,279	610,279
N. e. i.:		
United Kingdom	58,067	37,910
British possessions	2,759	....
Germany	7,631	10,901
France	....	15,801
United States	11,621	16,142
Other foreign countries	5,202	4,526
Total	85,280	85,280
Other (free):		
United States	25,787	30,045
United Kingdom	81,245	75,937
British possessions	4,029	1,187
Belgium	20,562	9,260
Germany	49,732	58,942
Netherlands	10,628	10,808
Norway	6,614	9,640
Sweden	10,263	11,499
Other foreign countries	1,465	3,007
Total	210,325	210,325

Australia buys and uses mainly the standard sizes of paper. Special sizes are in very moderate demand. These standard sizes may be classified as follows: Writing paper—Large post, medium post, double foolscap; book paper—foolscap, demy, medium, royal, super royal; printing paper—double demy, quad crown, quad demy; news paper—in rolls for cylinder presses; wrapping paper—kraft brown and bogus kraft brown.

As already stated, Australia is almost exclusively an importer of paper. A very small quantity of the coarser grades of brown wrapping paper is made in this State at Botany, near Sydney, and at the Cumberland Paper Mills, Lane Cove River, a plant controlled by Sydney interests, and a moderate business is done with boards. The proprietor of these mills informs me that his product will be of much better quality when he gets from America the "blankets." These are now on order and will shortly be installed. In two years' time the Cumberland Mills expect to be producing writing paper. There are no pulp mills in New South Wales.

METHODS OF QUOTING PRICES AND SUMMARY.

All papers sold on Australian account are quoted at c. i. f. and e., and in ordinary course are shipped "cash against documents."

It may be added, in conclusion, that the paper trade of New South Wales, as in fact that of the whole Commonwealth, is one which offers attractive possibilities to the American manufacturer. No special requirements of sizes or quality have as yet entered into the business. Medium grades in all lines are easily saleable, but there undoubtedly does exist a decided predilection for British stock, in stationery particularly. America already supplies a considerable proportion of the news paper used and enjoys the same customs privileges as does Canada. Any preferential rates that may be in force apply only to the product of the United Kingdom. It will, however, be necessary for the American manufacturer intending to exploit this market to be directly represented here and to keep his representative here an indefinite period, well equipped with samples, and authorized, too, to make such terms with the trade as circumstances may require. The competition is keen and an inexperienced salesman, or one not equipped with executive credentials, will hardly be found successful.

TASMANIA.

From Consul George M. Hanson, Hobart.

Tasmania is not a paper-producing country, though the surface of the untilled portion of the entire island is covered with a forest growth said to be adapted for making wood pulp. It is claimed that the population (under 200,000) is too small a market for the establishment of a paper-manufacturing plant. Most of the paper consumed here is imported from England, though that country is not always the country of origin. The bulk of the supply of news paper or print paper comes from the United States, Canada, and Germany; writing paper from England, Scotland, Austria, and the United States; book paper from England and the United States; and kraft or wrapping paper from Germany. Cardboard, strawboard, and stiff paper generally come from England, while the largest part of the tissue paper used in the fruit trade comes direct from Sweden.

The ordinary sizes of writing and book paper used in other countries is in demand here. Imported paper is for the most part duty free, though on some kinds the United Kingdom enjoys a preferential of 5 per cent. Stationery is protected by a duty of 35 per cent (England 30 per cent) in order that it may be made here. The manufacture of stationery does not mean the manufacture of paper. It simply means that plain paper in large sheets unruled and uncut is imported and the process of converting it into stationery is carried out here.

As indicated above Tasmania does not export paper of any kind. Practically all kinds are imported but no accurate figures as to the amount of imports are available. The reason is that Tasmania is part of the Commonwealth of Australia and no record is kept of interstate shipments. Most of the paper imports are landed in either Sydney or Melbourne and the merchants in all the Australian States are supplied from the warehouses in those cities. Inasmuch as the bulk of the paper used in Tasmania is ordered from either New South Wales of Victoria and delivered in Tasmania without customs duties or Government charges of any kind, it is impossible to supply figures.

The following table shows oversea imports only, and while they probably do not approximate one-fourth of the paper consumed, the figures are important in that they show the countries of origin and the comparative quantity of paper supplied by each:

Kinds of paper.	United Kingdom.	United States.	Germany.	Sweden.	Belgium.	New Zealand.
Writing paper	$12,531	$326	$1,036	$87	$311	$9
Stationery	20,614	710	3,679	82	9	958
Parchment	1,138	....	1,090	116	....	....
Paper hangings	12,190	1,075	272	....	....	....
Print paper	10,735	15,602	13,100	2,063	121	....
Tissue paper	4,545	....	7,046	16,804	....	....
Wrapping paper	846	....	1,323	2,404	656	155
Cardboard and pasteboard	1,260	335	481	....	....	....
Carpet felt	....	384	....	....	....	....
Total	63,859	18,432	28,027	21,556	1,097	1,122

MARKET REQUIREMENTS.

It will be observed that the United Kingdom supplies a large proportion of writing paper. The reason is that other countries must pay a duty of 5 per cent while British paper is free. Of the several grades of writing paper in use here two kinds are in great demand, one selling at 14 cents per pound, delivered in Hobart, and the other at 8 cents per pound. The cheaper paper is made into billheads, circulars, etc., while the higher priced articles is converted into stationery or made into letterheads. The cheaper grade is ordered by the ton. An American paper, similar in quality to the cheaper grade and costing about one-half cent per pound less, is also in demand. This paper has a watermark and is valued on that account, a feature more or less uncommon in the cheaper foreign papers. This paper is made into pads, memoranda tablets, business stationery, etc. An Austrian paper, costing 5 cents a pound, without watermark, is also used for the same purpose.

The book papers imported are stiff and heavy, sometimes tinted, but generally plain and unruled. They come largely from Scotland and England and are delivered in Hobart at from 10 to 20 cents per pound. The better qualities are used for bank ledgers and official record books. The printing paper, or news paper used here comes from several different countries. Canada furnishes the largest supply, though Canadian paper is ordered through London and generally appears on a bill of lading as of British origin. The United States is second, with Germany a close third. In the above table Canada does not appear as an exporter of news paper, for the simple reason that Canadian paper is landed at Sydney and not at Hobart.

As the population grows the market for print paper will increase. The demand at present is not likely to grow less. A small quantity of glazed printing paper is used in the illustrated weeklies and other magazines. The customs regulations require all print paper in sheets to be not less than 20 by 25 inches in order to come in duty free. One newspaper here gets its supply of print paper from Sweden; another from the United States. The price of print paper from all countries delivered in Hobart is about the same.

The German "kraft" paper is rapidly supplanting all other wrapping papers. It is a fine light paper, pliable and strong. The largest dealer here tells me that since kraft paper was introduced his firm is having a hard time getting rid of their old stock of manila and ordinary brown wrapping paper.

Much tissue paper is used here in packing fruit for both interstate and oversea shipment. It comes largely from Sweden and is quoted at 7 cents per pound, delivered in Hobart. The price of the tissue paper of the same grade from other countries is about 1 cent per pound higher. An inferior grade of tissue paper, known locally as "apple paper," is a sulphide tissue and can be delivered for 5 cents a pound. There is a big trade in this particular paper.

The price of stationery to the trade ranges from 10 cents to $1 per box. The average is 25 cents per box, which retails at 35 and 40 cents. The higher priced stationery is imported as such. The lower priced is made up here from plain paper in sheets not less than 13 by 16 inches.

It is to be expected that the paper trade of Tasmania should be supplied from England on account of transportation facilities. Even the papers of continental manufacture are ordered through London and shipment is made on a British steamer. The large manufacturing plants of America are in the Eastern States, and to reach the Australian market goods must either pay a high railroad tariff to San Francisco in addition to the trans-Pacific freight cost or be sent to England and be transshipped at a greater cost than that charged against English goods.

PANAMA CANAL INFLUENCE.

With paper, as with other products, the opening of the Panama Canal will insure a direct route to our eastern ports and give the United States an advantage of 3,000 miles in ocean travel in competition with European countries for Australian trade. The American papers now used here give good satisfaction but the lack of quick transportation facilities places the American manufacturer at a disadvantage. His products are ordered through England and each shipment must travel 15,000 miles to reach its destination. The key to increased American trade in every department, so far as Tasmania is concerned, is better transportation facilities, and, if possible, a system of business credits such as obtains among the English firms with which the merchants here deal. It is not uncommon for Hobart jobbers to receive from three to six months' credit, and, where business is continuous, a running account is kept. This system might not be possible with American business houses until better transportation arrangements are made, but it is an important factor in influencing trade. The merchant here, as in other countries, follows the lines of least resistance. In other words, he deals where he can get the most favors and he sometimes fails to recognize that a cash system, with commensurate discounts, is more profitable than a six months' term of credit and no discount. However, the American system of guaranteed payments is becoming more and more popular, though its general acceptance will be more or less slow.

NEW ZEALAND.

From Vice Consul General L. A. Bachelder, Auckland.

Almost the whole of the supplies of the following-named paper are imported from the United Kingdom: Writing paper (including bond, ledger, and linen paper), tissue, blotting, cover, cloth-lined, parchment, wax, and carbon paper.

A proportion of the cheaper writing papers are imported from the continent of Europe. Of carbon and writing paper, especially for typewriting purposes, a fair quantity is purchased from the United States. Parchment is imported also from Belgium, Germany, France, and the United States. Book papers, including Bible and India papers, are not imported, as practically no books are printed in New Zealand.

A large proportion (probably little more than half) of the news paper used comes from Canada, whilst the balance is procured from the United Kingdom. Prior to the coming into effect of the preferential tariff the supplies of news paper which now come from Canada were imported from the United States.

Wrapping, fiber, manila, and kraft paper is manufactured locally, a small quantity being imported from the United Kingdom.

The trade in wall paper is principally carried on with the United Kingdom, although small quantities are imported from the United States, Canada, and Germany. One feature which interferes somewhat with the sale of American wall paper is that the size differs from the English article. The English roll is 22 inches wide by 12 yards long; the American roll is 19 inches wide and either 8 or 16 yards long. Paper hangers become used to the English size and prefer it.

Strawboard, lined and unlined, is imported from the Netherlands and leather board from Sweden. Most of the other kinds of board are procured from the United Kingdom.

Fair quantities of account books and stationery made up ready for sale are imported, principally from the United Kingdom.

Supplies of box-paper flints are procured mainly from Germany, and a small proportion from Belgium. It is stated that the quality of the English article is too good for the present trade requirements here.

POSSIBILITIES OF SELLING AMERICAN PRODUCTS.

American paper is seriously handicapped by the preferential tariff, except for paper hangings, which are free of duty. This appears to be one of the chief reasons why so little trade is done with the United States. It therefore remains with the American manufacturers to decide if the price can be made such as will compete with this handicap. It would be necessary for this to be a little lower than the English in order to secure a fair portion of the trade. Buyers have now become so used to English papers, with their well-known watermarks, that some inducement would be required to cause a change. The choosing of agents is also a very important matter in the possibilities of American trade. Practically all the large wholesale houses have agencies and many of the larger retail houses have their buying agents in England. To secure business American agents would require to be energetic and keen salesmen, with both goods and prices to suit local requirements.

MARKET REQUIREMENTS.

According to New Zealand official statistics the quantity and value of paper imported during 1912 was as follows:

Kinds of paper.	Quantity.	Value.
	Cwt.	
Parchment (butter paper)	10,083	$95,865
Printing	2[illegible],013	1,035,582
Writing	40,982	304,756
Wrapping	23,597	109,582
Wall (paper hangings)		220,677

The following are the sizes in demand here: Writing paper, double medium, 36 by 23 inches; medium, 18 by 23 inches; large post, 16½ by 21 inches; double cap, 17 by 27 inches; double demy, 22½ by 35 inches. News paper, in rolls 39 inches wide by about 5,000 yards long; weight of 26 by 39 inches per ream, 36 pounds; some news paper a little lighter is used. Parchment, sizes vary considerably; those mostly imported are 12 by 48 inches, 12 by 36 inches, and 20 by 30 inches. The weight is about from 22 pounds to 28 pounds per ream. The largest demand for this paper is in the butter trade, where it is used for wrapping and for lining boxes. Boards, standard size "royal," 20 by 25 inches; straw board, size mostly imported by box makers is 30 by 40 inches; leather board, size varies, 24 by 28 inches predominates, weight 64 to 100 or 140 sheets per hundredweight. Box paper flints, in sheets 20 by 30 inches, and also in rolls.

The paper in general use for social and commercial correspondence is of medium quality.

HOME PRODUCTION.

Rags, waste paper, old hemp, and sacking are available in sufficient quantities for the present demand for raw materials suitable for the manufacture of "brown" and cap or tissue paper. Rags cost from about 6s. ($1.46) to 7s. 6d, ($1.82) per hundredweight.

Wood pulp is imported from Scandinavia for the manufacture of "kraft" paper. American wood pulp has been tried, but it is reported to be too soft for the requirements; also it was quoted f. o. b. American port, and owing to freight rates not being available this was a disadvantage when compared with a c. i. f. and e. quotation.

The New Zealand Paper Mills (Ltd.) is the only company manufacturing paper in New Zealand, and they have three mills, one each at Auckland, Dunedin, and Mataura. The class of paper manufactured is wrapping paper; that is, brown, kraft, and cap. The output of the three mills is estimated at 500 tons per month. There is a larger quantity of "kraft" paper manufactured than of the other two kinds. There are no pulp mills at present in New Zealand. The wages paid are: Engineers, $17.02 per week; firemen, $0.30 per hour; ordinary labor from $12.16 to $14.59 per week. Some expert labor has been imported with very satisfactory results, and as efforts are concentrated on the one class of paper it has been possible to secure most of the local trade. This has been materially assisted by the toms duty on the imported article of $1.21 per hundredweight, ther with a preferential rate in addition on all goods of other than h manufacture.

Two of the mills are equipped with English machinery, while in the third American machinery has been installed. The prices of locally manufactured paper are as follows: Cap, $136.26 per ton; kraft, $121.66 to $145.99 per ton; brown, $92.46 per ton.

The price of imported papers varies very considerably; approximate figures may be estimated from the statistics of imports of paper given in this report.

There is practically no export trade in paper from New Zealand. A small quantity of paper bags, wrapping paper, writing and printing paper, amounting in all to about $3,000 in 1912, was exported to the South Sea Islands and Australia.

The following figures show the imports of paper of all kinds into New Zealand for the year 1912, the latest available statistics:

Articles and countries.	Quantity.	Value.
Paper hangings:	*Cwt.*	
United Kingdom	....	$206,725
Canada	....	26,516
Germany	....	10,502
Belgium	....	8,515
United States	....	18,419
Total	....	270,677
Printing:		
United Kingdom	123,002	556,295
Australia	1,718	7,674
Canada	148,327	446,882
Germany	1,366	4,831
Other Europe	1,154	4,588
United States	1,446	5,312
Total	277,013	1,025,582
Wrapping:		
United Kingdom	6,443	32,858
Australia	563	2,663
Canada	29	496
United States	269	2,658
Germany	6,367	28,271
Norway	1,415	6,284
Sweden	8,406	34,632
Other countries	1,790	1,720
Total	25,282	109,582
Bags, coarse:		
United Kingdom	35	228
United States	206	3,042
Total	241	3,270
Bags, other kinds:	*Cwt.*	
United Kingdom	10,742	$59,754
Australia	7	73
Canada	87	909
Norway	10	58
United States	255	1,963
Total	11,101	62,757
Parchment (butter paper):		
United Kingdom	2,086	13,753
Australia	491	2,838
Canada	48	175
Germany	4,085	23,406
France	198	1,662
Norway	290	1,278
Sweden	1,102	5,851
Belgium	2,258	16,577
Russia	31	160
United States	14	165
Total	10,603	65,865
Writing:		
United Kingdom	35,463	268,112
Germany	1,486	9,083
Belgium	1,480	8,539
United States	955	8,607
Other countries	1,598	10,415
Total	40,982	304,756

Prior to the year 1908 a much larger portion of the paper trade was carried on with the United States than has been the case since that year. Where goods were admitted free in many cases duty amounting to 20 per cent ad valorem is now levied on the manufactures of all foreign countries. This has had a serious effect on trade with the United States and other foreign countries, and where local agents were acting previously on behalf of American manufacturers, now no business is done.

The methods of quoting prices are as follows: Writing paper by the pound; wrapping and news paper per hundredweight or ton of 2,240 pounds. Quotations are preferred on c. i. f. and e. basis. Terms to importers vary considerably, from cash to draft at 90 days sight. Local agents sometimes give a delivered price and take bills at 90 days after arrival of vessel. This method is in vogue particularly with box makers.

SOCIETY ISLANDS.

From Consul James H. Goodier, Tahiti.

The market for paper in the Society Islands is very limited; in fact it is so negligible that the active merchants in Tahiti, to whom application was made for trade information, stated that paper was so unimportant that little or no attention was paid to it whatsoever. This indicates a very small demand, which is borne out by the import and export statistics of this island.

The demand only calls for a supply of stock worth some $8,200. This is the valuation of all importations in 1912 of papers from countries other than France. Of this sum the United States furnished papers to the value of $6,110, or approximately 75 per cent of the total. England, Australia and New Zealand, and Germany, ranking in the order named, furnished all but $208 of the balance. It is patent that American goods labor under no disadvantages in this market.

Papers in use in Tahiti may be classified as follows: 1, stationery; 2, wall papers; 3, cigarette papers; 4, wrapping papers; 5, cardboard; 6, book papers; 7, blank books of all kinds; 8, playing cards; 9, paper bags; and 10, sandpapers. Of No. 1, the United States furnished in 1912, $2,604 worth; of No. 2, $66.97; of No. 3, none; of No. 4, $1,922; of No. 5, $33; of No. 6, $393.52; of No. 7, $373.07; of No. 8, $216.16; of No. 9, $281.20; and of No. 10, $130.27. The only items for which quantity figures are available for 1912 are for wrapping paper, 97,604.65 pounds; cardboard, 1,080.25 pounds; and 25 gross of playing cards. From the above it may readily be seen that stationery and wrapping papers are the kinds most in demand in Tahiti.

There can be said to be no standard or special sizes of papers in demand nor any special requirements as to quality, weight, finish, etc. The fact is that papers of every kind, quality, and size are imported for use in the islands of the Society Group.

APPENDIXES.

APPENDIX I.

The following statistics of imports and exports of paper are condensed from "Foreign Commerce and Navigation of the United States, 1914," just rendered available by the Bureau of Foreign and Domestic Commerce. The figures for the eight months ending February are from the "Monthly Summary of the Foreign Commerce of the United States," corrected to March 31, 1915, and inclusive of statistics of February, 1915.

IMPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914.

Articles and countries.	1913	1914
PAPER STOCK, CRUDE.		
Rags, except woolen (free).		
Europe:		
Austria-Hungary	$318	$36
Belgium	310,047	262,892
Denmark	22,098	23,709
France	607,807	524,129
Germany	1,025,869	574,625
Italy	14,244	11,925
Netherlands	284,069	190,107
Norway	8,063	1,627
Portugal	2,157	186
Russia in Europe	26	....
Spain	19,394	11,597
Sweden	6,172	963
Switzerland	2,997	1,092
Turkey in Europe	1,294	1,416
United Kingdom—		
England	710,408	609,173
Scotland	120,746	100,874
Ireland	30,439	29,825
North America:		
Canada	178,636	165,760
West Indies—		
British—		
Barbados	5	....
Jamaica	9	....
Cuba	9	....
Haiti	5	....
South America:		
Argentina	3	1,000
Brazil	12	....
Peru	4	....
Asia:		
East Indies—British—		
British India	13,422	....
Turkey in Asia	2,177	6,219
Africa:		
British Africa—South	8	....
Egypt	28,149	27,548
French Africa	24,558	7,759
Total	3,413,165	2,552,462
Recapitulation:		
Europe	3,166,168	2,344,176
North America	178,664	165,760
South America	19	1,000
Asia	15,599	6,219
Africa	52,715	35,307
PAPER STOCK, CRUDE—con.		
All other paper stock, crude (free).		
Europe:		
Austria-Hungary	$3,199	$52,057
Azores, and Madeira Is	377	6,151
Belgium	329,145	499,042
Denmark	17,471	19,535
France	295,753	379,623
Germany	636,898	1,196,880
Italy	29,361	62,038
Netherlands	179,959	180,663
Norway	9,708	10,282
Portugal	3,946	5,916
Russia in Europe	....	40,171
Spain	24,155	38,413
Sweden	2,947	882
Turkey in Europe	....	249
United Kingdom—		
England	1,442,071	1,952,886
Scotland	286,617	293,149
Ireland	20,074	29,453
North America:		
Bermuda	....	157
British Honduras	153	125
Canada	266,341	350,290
Central American States—		
Costa Rica	60	60
Guatemala	....	40
Honduras	10	....
Nicaragua	22	202
Panama	484	886
Mexico	2,254	965
Newf'l'd and Labrador	42,955	3,907
West Indies—		
British—		
Barbados	....	67
Jamaica	9	....
Other British	240	273
Cuba	347	115
Haiti	4	....
South America:		
Argentina	677	1,309
Brazil	484	35
Chile	10	....
Guiana—British	76	245
Peru	6	....
Uruguay	6	16
Asia:		
China	....	464
East Indies — British — British India	250,663	852,152

IMPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER STOCK, CRUDE—continued.		
All other paper stock, crude (free)—Continued.		
Asia—Continued.		
Hongkong	$2,836	....
Japan	1,099	$22,306
Turkey in Asia	....	497
Oceania:		
British—		
Australia and Tasmania	....	845
New Zealand	....	1,041
Philippine Islands	1,747	364
Africa:		
British Africa—		
South	42	....
West	35	10
Egypt	5,247	2,663
French Africa	752	12,821
Total	3,858,240	6,018,745
Recapitulation:		
Europe	3,281,681	4,767,390
North America	312,879	357,087
South America	1,259	1,605
Asia	254,598	875,419
Oceania	1,747	2,250
Africa	6,076	14,994
PAPER, AND MANUFACTURES OF.		
Books, music, maps, engravings, etchings, photographs, and other printed matter (free).		
Europe:		
Austria-Hungary	132,438	147,724
Azores, and Madeira Is	....	3
Belgium	28,549	26,445
Bulgaria	18	196
Denmark	17,994	23,887
Finland	8,559	9,159
France	370,456	428,664
Germany	1,029,991	994,859
Gibraltar	921	....
Greece	28,828	13,083
Greenland, Iceland, etc	4	....
Italy	134,420	98,628
Netherlands	51,615	38,131
Norway	31,764	38,983
Portugal	975	380
Roumania	77	....
Russia in Europe	55,045	66,886
Servia and Montenegro	478	518
Spain	21,837	26,924
Sweden	42,250	44,939
Switzerland	6,979	11,138
Turkey in Europe	2,187	2,028
United Kingdom—		
England	1,695,557	1,786,990
Scotland	12,751	11,576
Ireland	1,244	979
North America:		
Bermuda	5	....
Canada	111,839	108,380
Central American States—		
Costa Rica	55	5
Guatemala	95	70
Nicaragua	10	....
Panama	790	984
Mexico	10,258	5,990
Newf'l'd and Labrador	....	15
West Indies—		
British—		
Barbados	25	....
Jamaica	10	5
Trinidad and Tobago	116	....
Other British	98	....
Cuba	1,522	1,325
Haiti	100	....
Santo Domingo	25	....

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Books, etc. (free)—Contd.		
South America:		
Argentina	$282	$674
Brazil	39	920
Chile	5	50
Colombia	....	3,590
Ecuador	492	....
Peru	14,695	250
Uruguay	75	4,909
Venezuela	1,174	3,870
Asia:		
China	6,424	7,417
Chosen	260	198
East Indies—		
British—		
British India	361	285
Straits Settlements	....	60
Dutch	40	....
Hongkong	734	708
Japan	71,998	71,663
Turkey in Asia	3,590	6,124
Oceania:		
British—		
Australia and Tasmania	5,592	4,481
New Zealand	45	33
Other British	866	....
French	69	....
Philippine Islands	965	535
Africa:		
British Africa—South	607	....
Egypt	25	263
Total	3,908,223	3,994,869
Recapitulation:		
Europe	3,674,937	3,772,120
North America	124,948	116,774
South America	16,762	14,263
Asia	83,407	86,400
Oceania	7,537	5,049
Africa	632	263
Books, music, maps, engravings, etchings, photographs, and other printed matter (dutiable).		
Europe:		
Austria-Hungary	57,962	64,765
Azores, and Madeira Is	58	54
Belgium	46,105	36,771
Bulgaria	22	....
Denmark	4,171	8,431
Finland	1,098	2,143
France	127,218	137,908
Germany	395,387	421,799
Gibraltar	3	5
Greece	4,678	1,724
Iceland, and Faroe Islands	11	10
Italy	25,073	24,402
Netherlands	11,338	7,876
Norway	1,223	1,154
Portugal	83	26
Roumania	....	1
Russia in Europe	1,237	1,239
Spain	2,699	2,651
Sweden	20,180	17,880
Switzerland	15,569	17,020
Turkey in Europe	41	66
United Kingdom—		
England	1,657,596	1,556,299
Scotland	119,524	178,271
Ireland	4,023	6,769
North America:		
Bermuda	14	40
Canada	94,782	111,627
Central American States—		
Costa Rica	73	345
Guatemala	7	....
Honduras	....	3
Panama	815	356
Salvador	407	....

IMPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Books, etc. (dutiable)—Continued.		
North America—Continued.		
Mexico	$1,572	$1,767
Newf'l'd and Labrador	40	17
West Indies—		
British—		
Barbados	65	41
Jamaica	91	159
Trinidad and Tobago	355	75
Other British	26	13
Cuba	672	587
Danish	12	....
Dutch	30	....
Haiti	2	....
South America:		
Argentina	115	108
Brazil	50	235
Chile	44	110
Colombia	1	5
Ecuador	4	....
Peru	17	....
Asia:		
China	10,346	8,935
Chosen	....	2
East Indies—		
British—		
British India	1,776	1,370
Straits Settlements	90	11
Other British	15	17
Dutch	2	9
Hongkong	1,910	1,307
Japan	36,579	33,198
Russia in Asia	....	1
Turkey in Asia	428	65
Oceania:		
British—		
Australia and Tasmania	1,305	1,326
New Zealand	119	88
Other British	59	....
Philippine Islands	125	220
Africa:		
British Africa—South	44	10
Egypt	42	145
Total	2,647,333	2,649,396
Recapitulation:		
Europe	2,495,299	2,487,204
North America	98,963	115,030
South America	231	458
Asia	51,146	44,915
Oceania	1,608	1,634
Africa	86	155
Lithographic labels and prints, except post cards (dutiable).		
Europe:		
Austria-Hungary	15,552	18,501
Azores, and Madeira Is	2	....
Belgium	8,466	4,717
Denmark	248	437
Finland	12	....
France	57,818	52,680
Germany	1,401,707	1,352,240
Gibraltar	86	8
Greece	1,162	1,164
Italy	10,914	13,158
Netherlands	4,998	14,228
Norway	6	81
Portugal	9	65
Russia in Europe	454	543
PAPER, AND MANUFACTURES OF—continued.		
Lithographic labels, etc.—Con.		
Europe—Continued.		
Servia and Montenegro	$31	$26
Spain	1,713	1,466
Sweden	2,863	173
Switzerland	7,926	9,376
Turkey in Europe	19	14
United Kingdom—		
England	218,595	224,024
Scotland	46,430	51,959
Ireland	3,088	5,381
North America:		
Canada	2,569	4,859
Mexico	15	158
West Indies—Cuba	9,844	7,522
South America: Ecuador	....	1
Asia:		
China	1,166	1,101
East Indies—		
British—		
British India	3	....
Straits Settlements	360	....
Hongkong	349	299
Japan	1,827	2,057
Turkey in Asia	22	75
Oceania:		
British—		
Australia and Tasmania	25	44
New Zealand	4	....
Philippine Islands	....	14
Total	1,798,283	1,766,371
Recapitulation:		
Europe	1,782,099	1,750,241
North America	12,428	12,539
South America	....	1
Asia	3,727	3,523
Oceania	29	58
Paper hangings (dutiable).[1]		
Europe:		
Austria-Hungary	594	8
Belgium	6,281	13,325
France	31,819	28,577
Germany	646,358	576,779
Italy	7	50
Netherlands	....	110
Sweden	....	2,042
Switzerland	74	1,099
United Kingdom—		
England	154,473	142,023
Scotland	81,922	80,644
North America:		
Canada	9,201	1,790
West Indies—Cuba	2	....
Asia:		
China	5	413
Hongkong	217	805
Japan	104,712	86,112
Oceania: British—Australia and Tasmania	53	....
Total	1,035,718	933,777
Recapitulation:		
Europe	921,528	844,657
North America	9,203	1,790
Asia	104,934	87,330
Oceania	53	....

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[1] Figures for 1914 cover period from July 1 to Oct. 3, 1913, inclusive.

EXPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Photographic paper (dutiable).		
Europe:		
Austria-Hungary	$2,665	$1,143
Belgium	149,772	106,368
France	363,694	447,533
Germany	649,822	728,469
Italy	49	844
Netherlands	....	36
Sweden	....	64
Switzerland	1,164	96
United Kingdom—England	70,782	67,403
North America: Canada	694	177
Asia: Japan	....	10
Total	1,238,642	1,352,143
Recapitulation:		
Europe	1,237,948	1,351,956
North America	694	177
Asia	....	10
Printing paper valued at not above 2½ cents per pound (free).		
Europe:		
Germany	....	13,842
Italy	....	2,511
Norway	....	84,985
Sweden	....	22,320
North America: Canada	4,512,807	10,241,385
Total	4,512,807	10,365,043
Recapitulation:		
Europe	....	123,658
North America	4,512,807	10,241,385
Printing paper valued at not above 2½ cents per pound (dutiable).[1]		
Europe:		
Germany	567	410
Norway	27,896	740
Sweden	6,346	5,374
United Kingdom—Scotland	11	....
North America: Canada	1,133,482	393,541
Total	1,168,302	400,065
Recapitulation:		
Europe	34,820	6,524
North America	1,133,482	393,541
Printing paper valued at above 2½ cents and not above 4 cents per pound (free).[2]		
Europe:		
Germany	....	7,687
Norway	....	10,897
Sweden	....	1,437
Total	....	20,021
All other printing paper (dutiable).		
Europe:		
Austria-Hungary	8,996	3,610
Belgium	31,312	17,327
Denmark	60	....
France	3,745	4,013
Germany	33,940	54,742

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
All other printing paper (dutiable)—Continued.		
Europe—Continued.		
Italy	$20,099	$14,112
Netherlands	75,307	67,208
Norway	28,387	21,423
Sweden	12,625	14,099
United Kingdom—		
England	115,698	67,693
Scotland	22,581	26,184
North America: Canada	164	66
Asia: Hongkong	....	53
Total	352,914	290,530
Recapitulation:		
Europe	352,750	290,411
North America	164	66
Asia	....	53
Souvenir post cards (dutiable).		
Europe:		
Austria-Hungary	12,800	6,754
Belgium	50	114
Denmark	80	49
Finland	....	77
France	1,585	4,988
Germany	453,786	418,930
Greece	119	86
Italy	237	3,011
Netherlands	13	914
Norway	44	74
Portugal	....	5
Russia in Europe	29	46
Spain	160	346
Sweden	299	57
Switzerland	36	88
United Kingdom—		
England	10,636	22,153
Scotland	455	261
Ireland	34	328
North America:		
Canada	1,427	645
Mexico	2,007	1,043
West Indies—Cuba	5	56
South America: Brazil	....	13
Asia:		
China	4	30
Chosen	2	....
East Indies — British — British India	45	....
Japan	603	3,990
Turkey in Asia	12	....
Oceania: Philippine Islands	3	....
Africa: Egypt	4	....
Total	484,481	464,058
Recapitulation:		
Europe	480,369	458,281
North America	3,439	1,744
South America	....	13
Asia	666	4,020
Oceania	3	....
Africa	4	....
Surface-coated paper (dutiable).		
Europe:		
Austria-Hungary	3,101	2,464
Belgium	135,894	169,225
France	12,380	10,447
Germany	395,262	394,575
Italy	....	15
Netherlands	61	2,002

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[1] Figures for 1914 cover period from July 1 to Oct. 3, 1913, inclusive.

[2] Figures cover period from July 28 to Oct. 3, 1913, inclusive.

IMPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Surface-coated paper—Contd.		
Europe—Continued.		
Norway	....	$1,288
Spain	$14	....
Sweden	....	2,787
Switzerland	175	82
United Kingdom—		
England	44,949	27,810
Scotland	4,410	5,841
Ireland	431	38
North America: Canada	338	3,057
Asia:		
Hongkong	33	....
Japan	286	430
Total	597,334	620,061
Recapitulation:		
Europe	596,677	616,574
North America	338	3,057
Asia	319	430
Wrapping paper (*dutiable*).		
Europe:		
Austria-Hungary	113	359
Belgium	2,578	2,387
Denmark	2,333	2,190
Finland	255	....
France	3,644	1,296
Germany	30,369	90,801
Italy	458	2,145
Netherlands	3,083	2,552
Norway	122,446	99,926
Portugal	....	53
Spain	64,459	57,265
Sweden	502,296	442,331
Switzerland	393	402
United Kingdom—		
England	5,409	4,079
Scotland	1,295	2,938
Ireland	102	88
North America:		
Canada	1,657	317,804
Mexico	10	849
Asia:		
Hongkong	261	220
Japan	398	365
Total	741,469	1,028,500
Recapitulation:		
Europe	739,143	709,262
North America	1,667	318,653
Asia	659	585
All other paper and paper board valued at not above 4 cents per pound (*free*).[1]		
Europe:		
Austria-Hungary	....	168
Belgium	....	90
Denmark	....	74
Germany	....	17,015
Norway	....	48,300
Sweden	....	104,436
North America: Canada	210,298	195,968
Total	210,298	366,051
Recapitulation:		
Europe	....	170,083
North America	210,298	195,968
PAPER, AND MANUFACTURES OF—continued.		
All other paper (*free*).[2]		
Europe:		
Austria-Hungary	....	$18
Germany	....	14,685
Norway	....	171
Russia in Europe	....	323
Sweden	....	2,256
United Kingdom—England	....	17,858
North America:		
Canada	....	98
West Indies—Cuba	....	7
Total	....	35,416
Recapitulation:		
Europe	....	35,311
North America	....	105
All other paper (*dutiable*).		
Europe:		
Austria-Hungary	$60,297	77,226
Azores, and Madeira Is	8	....
Belgium	55,859	60,448
Denmark	309	166
Finland	4,272	6,868
France	183,448	199,252
Germany	1,565,542	1,755,808
Gibraltar	....	9
Greece	9	39
Italy	34,551	41,258
Netherlands	24,680	20,848
Norway	14,062	17,324
Portugal	29	100
Russia in Europe	310	48
Spain	7,258	6,079
Sweden	108,175	54,221
Switzerland	20,709	13,901
Turkey in Europe	253	209
United Kingdom—		
England	404,836	398,781
Scotland	13,305	19,450
Ireland	6,906	2,534
North America:		
Canada	14,370	249,101
Central American States—Panama	2	....
Mexico	224	492
West Indies—British	....	4
Cuba	40	370
Danish	2	....
Asia:		
China	10,558	16,675
Chosen	4	2
East Indies—British—		
British India	8	42
Other British	13	14
Hongkong	11,593	10,393
Japan	301,000	325,534
Persia	....	32
Turkey in Asia	36	238
Oceania:		
British—Australia and Tasmania	58	41
Philippine Islands	115	24
Africa: Egypt	....	8
Total	2,842,841	3,277,539
RECAPITULATION:		
Europe	2,504,818	2,674,569
North America	14,638	249,967
South America	....	....
Asia	323,212	352,930
Oceania	173	65
Africa	....	8

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[1] Figures for 1914 cover period from July 1 to Oct. 3, 1913, inclusive.
[2] Figures cover period since Oct. 3, 1913.

IMPORTS OF PAPER, ETC., EIGHT MONTHS ENDING FEBRUARY.

Articles and countries.	1913	1914	1915
Books, music, maps, engravings, etchings, photographs, and other printed matter:			
France	$357,097	$407,108	$158,115
Germany	1,031,049	990,712	613,712
United Kingdom	2,662,806	2,443,490	2,708,438
Other Europe	541,877	503,890	344,707
Other countries	269,004	260,679	323,667
Total	4,861,833	4,605,879	4,148,639
Printing paper for books and newspapers:			
Germany	18,308	57,572	12,544
Norway	46,584	52,511	88,460
Canada	3,081,051	6,702,561	8,218,204
Other countries	182,287	163,630	166,406
Total	3,328,230	6,976,274	8,485,614

EXPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914.

Articles and countries.	1913	1914
PAPER STOCK.		
Rags, not elsewhere specified, and other (except wood pulp).		
Europe:		
Belgium	$105,329	$159,867
France	5,872	5,087
Germany	136,237	118,596
Italy	2,211	....
Netherlands	30,221	91,706
Spain	160	....
United Kingdom—		
England	26,921	8,227
Scotland	296	387
North America:		
British Honduras	126	....
Canada	326,846	347,424
Central American States—		
Guatemala	145	....
Newf'l'd and Labrador	120	....
South America: Brazil	....	1,220
Asia:		
East Indies—		
British—		
British India	....	4,745
Straits Settlements	....	425
Dutch	....	2,500
Hongkong	504	....
Japan	105	....
Africa:		
British Africa—South	....	110
Total	635,093	740,294
Recapitulation:		
Europe	307,247	383,870
North America	327,237	347,424
South America	....	1,220
Asia	609	7,670
Oceania	....	....
Africa	....	110
PAPER AND MANUFACTURES OF.		
Bags.		
Europe:		
Belgium	102	90
France	15	124
Germany	168	384
Netherlands	176	101
Russia in Europe	....	2,286
United Kingdom—		
England	4,230	1,777
Scotland	129	26
PAPER, AND MANUFACTURES OF—continued.		
Bags—Continued.		
North America:		
Bermuda	$2,216	$2,830
British Honduras	2,232	2,258
Canada	57,281	51,472
Central American States—		
Costa Rica	9,639	10,618
Guatemala	1,809	1,586
Honduras	3,760	3,623
Nicaragua	2,553	1,851
Panama	29,354	30,901
Salvador	648	733
Mexico	18,493	9,814
Miquelon, Langley, etc	64	196
Newf'l'd and Labrador	7,931	7,660
West Indies—		
British—		
Barbados	2,596	2,732
Jamaica	2,070	2,184
Trinidad and Tobago	3,039	6,202
Other British	3,197	3,832
Cuba	162,742	166,182
Danish	1,294	1,101
Dutch	47	18
French	99	62
Haiti	1,348	902
Santo Domingo	537	212
South America:		
Argentina	439	1,533
Bolivia	35	55
Brazil	849	873
Chile	1,980	2,884
Colombia	948	1,752
Ecuador	2,160	5,265
Guiana—		
British	159	378
Dutch	2,020	2,610
French	88	48
Peru	4,005	5,489
Uruguay	1,434	851
Venezuela	307	754
Asia:		
China	329	365
Chosen	33	28
East Indies—		
British—		
British India	25	111
Straits Settlements	25	143
Dutch	....	10
Hongkong	49	135
Japan	....	12
Russia in Asia	2	50
Turkey in Asia	....	45

EXPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Bags—Continued.		
Oceania:		
British—		
Australia and Tasmania	$39,402	$41,694
New Zealand	2,322	3,589
Other British	1,800	1,273
French	264	504
German	22	173
Philippine Islands	8,140	9,577
Africa:		
British Africa—		
South	45,007	20,706
East	81	....
German Africa	78	162
Portuguese Africa	6,967	9,239
Total	436,799	422,075
Recapitulation:		
Europe	4,820	4,788
North America	313,009	306,979
South America	14,424	22,492
Asia	463	899
Oceania	51,950	56,810
Africa	52,133	30,107
Books, music, maps, engravings, etchings, photographs, and other printed matter.		
Europe:		
Austria-Hungary	10,890	24,920
Belgium	29,905	32,609
Bulgaria	330	97
Denmark	10,883	13,867
Finland	1,700	3,405
France	171,967	86,476
Germany	217,612	235,920
Gibraltar	598	266
Greece	2,026	3,049
Italy	25,299	32,992
Netherlands	29,209	24,780
Norway	6,182	8,330
Portugal	1,258	1,862
Roumania	1,225	1,901
Russia in Europe	14,018	16,689
Servia and Montenegro	97	134
Spain	8,865	9,988
Sweden	7,484	9,412
Switzerland	5,957	7,315
Turkey in Europe	1,810	4,981
United Kingdom—		
England	1,589,928	1,512,522
Scotland	48,283	40,075
Ireland	1,605	2,101
North America:		
Bermuda	13,999	13,709
British Honduras	3,888	3,916
Canada	5,083,345	4,905,329
Central American States—		
Costa Rica	34,956	16,725
Guatemala	22,005	23,847
Honduras	7,967	16,743
Nicaragua	26,127	14,594
Panama	77,867	78,543
Salvador	14,739	19,343
Mexico	191,791	321,914
Miquelon, Langley, etc	....	23
Newf'l'd and Labrador	16,949	19,319
West Indies—		
British—		
Barbados	2,170	1,736
Jamaica	11,333	11,376
Trinidad and Tobago	6,193	10,249
Other British	3,868	4,592
Cuba	237,482	239,359
Danish	1,537	1,457
Dutch	738	713
French	468	529
Haiti	9,335	5,286
Santo Domingo	17,999	12,307

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Books, etc.—Continued.		
South America:		
Argentina	$172,145	$130,661
Bolivia	63,228	74,707
Brazil	280,304	227,866
Chile	269,879	109,509
Colombia	26,854	27,664
Ecuador	25,966	53,332
Guiana—		
British	2,123	3,144
Dutch	260	261
French	....	120
Paraguay	114	621
Peru	34,887	23,906
Uruguay	13,820	30,008
Venezuela	16,720	13,445
Asia:		
Aden	....	250
China	441,898	143,743
China, leased territory—		
British	....	970
German	198	281
Japanese	79	30
Chosen	2,511	1,078
East Indies—		
British—		
British India	32,200	35,110
Straits Settlements	4,930	7,976
Other British	2,428	3,671
Dutch	968	2,234
French	....	6
Hongkong	19,885	4,301
Japan	95,380	115,962
Persia	133	....
Russia in Asia	224	48
Siam	1,031	2,367
Turkey in Asia	4,773	4,996
Oceania:		
British—		
Australia and Tasmania	302,692	376,721
New Zealand	70,241	70,698
Other British	1,774	1,446
French	765	1,324
German	35	1,102
Philippine Islands	188,859	317,996
Africa:		
Belgian Kongo	....	1,800
British Africa—		
West	1,525	920
South	33,381	37,780
East	656	34
Canary Islands	50	1,855
Egypt	3,283	1,447
French Africa	105	212
German Africa	757	101
Liberia	2,071	2,840
Madagascar	30	....
Morocco	....	120
Portuguese Africa	1,675	794
Total	10,092,719	9,639,860
Recapitulation:		
Europe	2,187,131	2,073,691
North America	5,784,751	5,721,609
South America	906,300	704,253
Asia	606,638	323,123
Oceania	564,366	769,281
Africa	43,533	47,908
Boxes and cartons.		
Europe:		
Belgium	109	7
Denmark	28	....
France	262	364
Germany	249	1,914
Greece	705	....
Netherlands	112	2,382
Portugal	....	133
United Kingdom—		
England	5,857	10,483
Scotland	4,545	880

EXPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued		
Boxes and cartons—Contd.		
North America:		
Bermuda	$718	$727
British Honduras	184	73
Canada	451,769	359,257
Central American States—		
Costa Rica	317	809
Guatemala	292	589
Honduras	1,076	1,355
Nicaragua	344	354
Panama	6,938	14,344
Mexico	11,510	3,794
Newf'l'd and Labrador	2,612	1,558
West Indies—		
British—		
Barbados	14	....
Jamaica	16,044	20,025
Trinidad and Tobago	186	539
Other British	399	20
Cuba	11,136	12,825
French	....	6
Haiti	334	136
Santo Domingo	4,360	5,540
South America:		
Argentina	1,925	2,715
Brazil	4,168	53
Chile	427	412
Colombia	1,039	1,794
Ecuador	50	129
Guiana—Dutch	....	27
Peru	221	102
Uruguay	195	33
Venezuela	1,122	1,030
Asia:		
China	13,422	3,738
Chosen	....	9
East Indies—British—		
British India	....	832
Hongkong	177	50
Japan	176	45
Oceania:		
British—		
Australia and Tasmania	3,913	86
New Zealand	107	35
Philippine Islands	4,708	9,825
Africa:		
British Africa—South	1,145	370
Portuguese Africa	126	....
Total	553,021	459,459
Recapitulation:		
Europe	11,867	16,163
North America	508,233	422,011
South America	9,147	6,295
Asia	13,775	4,674
Oceania	8,728	9,946
Africa	1,271	370
Carbon paper.		
Europe:		
Austria-Hungary	2,999	8,360
Belgium	8,209	11,023
Bulgaria	....	53
Denmark	4,249	3,751
Finland	110	490
France	12,976	30,339
Germany	70,733	119,205
Italy	6,563	6,616
Netherlands	1,743	3,913
Norway	692	997
Portugal	312	560
Russia in Europe	7,332	22,578
Spain	479	1,230
Sweden	360	3,750
Switzerland	6,194	8,577
Turkey in Europe	....	462
United Kingdom—		
England	129,427	123,074
Scotland	2,344	3,479
Ireland	21	98

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Carbon paper—Continued.		
North America:		
Bermuda	$61	$43
British Honduras	14	7
Canada	28,898	28,898
Central American States—		
Costa Rica	1,164	507
Guatemala	76	229
Honduras	33	148
Nicaragua	63	945
Panama	1,229	2,743
Salvador	135	35
Mexico	11,915	5,445
Newf'l'd and Labrador	120	103
West Indies—		
British—		
Barbados	11	41
Jamaica	200	460
Trinidad and Tobago	147	2
Other British	14	21
Cuba	9,633	12,851
Dutch	10	8
Haiti	78	177
Santo Domingo	417	304
South America:		
Argentina	2,530	8,358
Bolivia	69	....
Brazil	5,957	5,073
Chile	1,563	8,108
Colombia	287	582
Ecuador	203	225
Guiana—		
British	27	155
Dutch	29	77
Paraguay	....	15
Peru	1,251	1,704
Uruguay	1,001	913
Venezuela	199	521
Asia:		
China	365	1,919
Chosen	....	12
East Indies—		
British—		
British India	8,462	20,500
Straits Settlements	228	339
Dutch	470	957
Hongkong	956	248
Japan	10,170	4,266
Russia in Asia	....	50
Siam	60	172
Turkey in Asia	....	35
Oceania:		
British—		
Australia and Tasmania	25,509	34,312
New Zealand	2,720	4,349
French	14	....
Philippine Islands	12,237	8,230
Africa:		
British Africa—South	3,013	2,329
Canary Islands	....	172
Egypt	242	146
Liberia	....	53
Portuguese Africa	354	561
Total	386,877	505,203
Recapitulation:		
Europe	254,743	348,555
North America	54,218	52,267
South America	13,116	25,731
Asia	20,711	28,498
Oceania	40,480	46,891
Africa	3,609	3,261
Paper hangings.		
Europe:		
Austria-Hungary	10	150
Azores, and Madeira Is.	19	81
Belgium	125	438
Denmark	....	15
Finland	....	30

EXPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Paper hangings—Continued.		
Europe—Continued.		
France	$661	$522
Germany	15,276	16,725
Italy		557
Netherlands	1,736	910
Norway		268
Russia in Europe	92	732
Spain		59
Sweden		375
Switzerland		16
United Kingdom—		
England	49,480	39,892
Scotland	684	1,017
Ireland		62
North America:		
Bermuda	34	66
British Honduras	16	
Canada	317,414	313,397
Central American Sts.—		
Costa Rica	595	1,305
Guatemala	958	849
Honduras	21	
Nicaragua	389	
Panama	307	938
Salvador		97
Mexico	30,077	11,833
Miquelon, Langley, etc	90	60
New'f'ld and Labrador	5,195	8,267
West Indies—		
British—		
Barbados	26	
Jamaica	156	764
Trinidad and Tobago	76	70
Other British	102	463
Cuba	358	1,204
Danish	314	83
Dutch	178	87
Haiti	246	679
Santo Domingo	33	288
South America:		
Argentina	3,381	1,932
Bolivia	105	
Brazil	2,454	2,031
Chile	4,440	2,374
Colombia	928	1,675
Ecuador	2,313	929
Peru	1,247	3,081
Uruguay	1,275	102
Venezuela	4,586	2,375
Asia:		
China	90	307
China, leased territory—		
German	34	
Japanese		418
Chosen	34	
East Indies—Dutch	93	
Russia in Asia	30	
Oceania:		
British—		
Australia and Tasmania	17,905	19,476
New Zealand	17,166	15,916
French	42	
Philippine Islands		163
Africa:		
British Africa—South	963	334
Portuguese Africa	1,082	
Total	482,836	453,412
Recapitulation:		
Europe	68,083	61,849
North America	356,585	340,450
South America	20,729	14,499
Asia	281	725
Oceania	35,113	35,555
Africa	2,045	334

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Playing cards.		
Europe:		
Austria-Hungary	$437	$637
Belgium	101	38
Denmark	275	141
France	40	214
Germany	6,319	7,349
Italy	251	554
Malta, Gozo, etc	349	
Netherlands	242	282
Portugal	1,166	1,215
Russia in Europe	480	
Spain		137
Switzerland	43	86
Turkey in Europe	1,036	976
United Kingdom—England	43,532	37,692
North America:		
Bermuda	249	254
British Honduras	74	221
Canada	46,915	38,949
Central American States—		
Costa Rica	1,114	755
Guatemala	343	212
Honduras	112	438
Nicaragua	877	733
Panama	5,584	2,864
Salvador	729	208
Mexico	1,842	1,425
Newf'l'd and Labrador	952	948
West Indies—		
British—		
Barbados	825	
Jamaica	311	701
Trinidad and Tobago	108	112
Other British	111	22
Cuba	7,632	7,059
Danish	43	525
Dutch	186	309
French		178
Haiti	3,862	2,268
Santo Domingo	74	148
South America:		
Argentina	24,110	14,988
Bolivia	1,111	428
Brazil	5,235	4,914
Chile	7,970	6,032
Colombia	485	960
Ecuador	600	506
Guiana—		
British	51	66
Dutch	180	61
Paraguay	311	898
Peru	2,578	1,849
Uruguay	4,095	6,570
Venezuela	1,230	1,652
Asia:		
China	5,681	6,922
China, leased territory—		
Japanese	7,235	6,606
Chosen	63	56
East Indies—		
British—		
British India	55,382	58,909
Straits Settlements	5,724	4,594
Other British	174	83
Dutch	312	
Hongkong	22,723	56,822
Japan	1,365	1,064
Russia in Asia	54	
Siam		99
Oceania:		
British—		
Australia and Tasmania	17,333	19,147
New Zealand	10,174	7,553
Other British	535	219

EXPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
Playing cards—Continued.		
Oceania—Continued.		
French	$291	$74
German	21	120
Philippine Islands	6,595	7,484
Africa:		
British Africa—		
West	92	....
South	10,248	12,103
East	113	[illegible]38
Egypt	342	41[illegible]
German Africa	319	164
Portuguese Africa	840	1,171
Total	319,786	330,194
Recapitulation:		
Europe	54,271	49,321
North America	71,943	58,311
South America	47,956	38,901
Asia	98,713	135,146
Oceania	34,949	34,597
Africa	11,954	13,918
News print.		
Europe:		
Belgium	270	....
Italy	63	....
United Kingdom—		
England	126,336	46,391
Ireland	41,720	44,510
North America:		
Bermuda	1,698	1,137
British Honduras	254	153
Canada	167,359	151,783
Central American States—		
Costa Rica	7,380	9,575
Guatemala	6,326	6,020
Honduras	40	512
Nicaragua	148	158
Panama	5,965	5,308
Salvador	9,579	5,368
Mexico	27,910	13,218
West Indies—		
British—		
Barbados	543	422
Jamaica	21,829	22,176
Trinidad and Tobago	3,483	3,926
Other British	69	751
Cuba	208,201	266,257
Danish	58	57
Dutch	210	174
Haiti	676	630
Santo Domingo	1,437	2,204
South America:		
Argentina	709,010	447,908
Bolivia	2,851	7,218
Brazil	9,145	7,347
Chile	75,692	37,141
Colombia	20,825	23,983
Ecuador	1,701	2,905
Guiana—British	960	628
Peru	19,419	18,472
Uruguay	17,502	4,921
Venezuela	34,925	33,485
Asia: Japan	28,550	1,720
Oceania:		
British—		
Australia and Tasmania	795,983	947,185
New Zealand	125	150
Philippine Islands	102,028	63,045
Africa: British Africa—South	250	645
Total	2,450,520	2,177,483
PAPER, AND MANUFACTURES OF—continued.		
News print—Continued.		
Recapitulation:		
Europe	$168,389	$90,901
North America	463,165	489,829
South America	892,030	584,008
Asia	28,550	1,720
Oceania	898,136	1,010,380
Africa	250	645
All other printing paper.		
Europe:		
Austria-Hungary	2,037	1,679
Belgium	2,705	2,954
Denmark	1,099	1,255
France	1,678	3,786
Germany	3,960	5,832
Netherlands	....	2,450
Norway	30	....
Portugal	258	....
Spain	....	8,319
Sweden	69[illegible]	....
Switzerland	....	204
United Kingdom—		
England	249,152	294,557
Scotland	367	2,174
Ireland	865	....
North America:		
Bermuda	1,437	1,755
British Honduras	47	67
Canada	586,693	601,909
Central American States—		
Costa Rica	7,788	4,337
Guatemala	4,991	3,900
Honduras	1,036	569
Nicaragua	75	14
Panama	10,540	11,153
Salvador	2,271	2,351
Mexico	50,344	32,111
Newf'l'd and Labrador	2,913	335
West Indies—		
British—		
Barbados	756	727
Jamaica	4,333	[illegible],003
Trinidad and Tobago	200	223
Other British	709	745
Cuba	271,937	263,157
Danish	208	61
Dutch	79	....
Haiti	569	755
Santo Domingo	2,316	6,271
South America:		
Argentina	11,803	25,613
Bolivia	1,239	1,302
Brazil	2,590	2,724
Chile	48,207	40,665
Colombia	10,346	12,430
Ecuador	1,779	3,471
Guiana—British	268	901
Peru	4,958	4,697
Uruguay	5,040	3,545
Venezuela	18,307	6,570
Asia:		
China	668	1,615
East Indies—British—		
British India	195	255
Straits Settlements	105	....
Other British	....	133
Hongkong	324	128
Japan	43,031	33,651
Oceania:		
British—		
Australia and Tasmania	150,834	132,498
New Zealand	2,152	1,819
French	25	175
Philippine Islands	92,256	80,646
Africa: British Africa—South	487	1,874
Total	1,606,099	1,612,370

EXPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
All other printing paper—Continued.		
Recapitulation:		
Europe	$262,843	$323,210
North America	949,242	934,443
South America	104,537	101,923
Asia	44,323	35,782
Oceania	245,267	215,138
Africa	487	1,874
Wrapping paper.		
Europe:		
Austria-Hungary	98	958
Belgium	164	25
France	1,111	2,454
Germany	8,004	7,613
Italy	11,306	3,771
Netherlands	5,068	3,066
Russia in Europe	687	....
Spain	422	....
Sweden	1,000	....
United Kingdom—		
England	98,700	52,227
Scotland	69	943
North America:		
Bermuda	1,404	2,070
British Honduras	786	675
Canada	285,602	289,857
Central American States—		
Costa Rica	3,295	2,642
Guatemala	4,341	1,416
Honduras	1,141	886
Nicaragua	922	567
Panama	17,369	19,131
Salvador	448	259
Mexico	18,342	11,954
Miquelon, Langley, etc	....	74
Newf'l'd and Labrador	1,801	1,842
West Indies—		
British—		
Barbados	1,242	2,008
Jamaica	5,023	5,965
Trinidad and Tobago	933	1,564
Other British	3,452	5,854
Cuba	41,386	44,391
Danish	109	215
Dutch	123	163
French	8	9
Haiti	2,379	2,212
Santo Domingo	1,125	1,993
South America:		
Argentina	998	1,321
Bolivia	....	270
Brazil	5,300	2,582
Chile	802	1,071
Colombia	1,794	3,476
Ecuador	72	1,653
Guiana—		
British	104	57
Dutch	158	274
Peru	1,450	639
Uruguay	....	873
Venezuela	7,650	6,682
Asia:		
China	281	179
Chosen	18	45
East Indies—		
British—		
British India	1,089	133
Straits Settlements	....	321
Dutch	....	6
Hongkong	12	485
Japan	11,689	5,417
Russia in Asia	....	12
PAPER, AND MANUFACTURES OF—continued.		
Wrapping paper—Continued.		
Oceania:		
British—		
Australia and Tasmania	$9,513	$6,473
New Zealand	283	737
French	1,396	1,904
German	....	14
Philippine Islands	17,585	30,839
Africa: British Africa—South	657	390
Total	578,711	532,657
Recapitulation:		
Europe	126,629	71,057
North America	391,231	395,747
South America	18,328	18,898
Asia	13,089	6,598
Oceania	28,777	39,967
Africa	657	390
Writing paper and envelopes.		
Europe:		
Austria-Hungary	1,150	2,949
Azores, and Madeira Is	90	197
Belgium	2,514	3,394
Denmark	1,599	2,113
Finland	343	226
France	9,470	8,681
Germany	8,680	9,778
Gibraltar	102	....
Greece	494	1,139
Italy	3,847	3,085
Malta, Gozo, etc	225	....
Netherlands	2,088	3,815
Norway	1,076	1,526
Portugal	594	103
Roumania	60	100
Russia in Europe	1,350	2,073
Servia and Montenegro	....	125
Spain	2,864	2,892
Sweden	1,222	5,016
Switzerland	1,354	2,425
Turkey in Europe	2,645	1,832
United Kingdom—		
England	49,466	42,462
Scotland	2,828	1,674
Ireland	278	438
North America:		
Bermuda	2,481	2,057
British Honduras	4,228	4,982
Canada	550,624	427,545
Central American States—		
Costa Rica	12,188	12,126
Guatemala	9,524	13,882
Honduras	11,008	17,069
Nicaragua	5,342	7,573
Panama	36,629	41,725
Salvador	2,655	1,579
Mexico	121,205	55,807
Miquelon, Langley, etc	....	145
Newf'l'd and Labrador	6,674	13,061
West Indies—		
British—		
Barbados	1,262	1,303
Jamaica	13,263	14,631
Trinidad and Tobago	1,827	3,660
Other British	1,930	3,771
Cuba	115,557	114,775
Danish	1,490	783
Dutch	645	573
French	276	249
Haiti	6,838	1,920
Santo Domingo	12,990	13,266
South America:		
Argentina	45,032	18,884
Bolivia	1,900	2,134
Brazil	19,304	22,709

EXPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER AND MANUFACTURES OF—continued.		
Writing paper, etc.—Con.		
South America—Continued.		
Chile	$12,225	$8,773
Colombia	14,779	25,579
Ecuador	2,431	19,315
Guiana—		
British	566	564
Dutch	170	90
French	36	....
Peru	20,982	16,068
Uruguay	3,194	3,676
Venezuela	11,899	11,662
Asia:		
Aden	135	360
China	15,250	6,359
China, leased territory—		
British	....	15
Chosen	750	548
East Indies—		
British		
British India	14,627	17,123
Straits Settlements	300	1,457
Other British	724	939
Dutch	307	1,988
French	168	....
Hongkong	1,677	1,332
Japan	6,843	11,919
Russia in Asia	109	66
Siam	507	2,709
Turkey in Asia	1,751	1,036
Oceania:		
British		
Australia and Tasmania	56,596	75,296
New Zealand	10,526	13,621
Other British	10	49
French	2,570	2,803
German	284	46
Philippine Islands	79,860	64,980
Africa:		
Belgian Kongo	....	12
British Africa		
West	100	107
South	10,789	5,775
East	140	35
Canary Islands	67	153
Egypt	828	445
French Africa	145	135
German Africa	174	....
Liberia	194	214
Madagascar	95	....
Morocco	140	100
Portuguese Africa	654	315
Tripoli	75	....
Total	1,351,226	1,179,232
Recapitulation:		
Europe	94,339	96,043
North America	918,546	752,482
South America	132,184	120,772
Asia	43,106	45,850
Oceania	149,590	156,794
Africa	13,401	7,291
All other paper.		
Europe:		
Austria-Hungary	3,548	6,743
Azores and Madeira Is.	22	135
Belgium	7,353	6,253
Bulgaria	124	....
Denmark	5,750	11,285
Finland	....	264
France	16,481	28,171
Germany	63,833	71,849
Gibraltar	....	16
Greece	1,332	1,631
PAPER AND MANUFACTURES OF—continued.		
All other paper—Continued.		
Europe—Continued.		
Italy	$3,925	$7,656
Netherlands	25,397	32,503
Norway	3,425	7,983
Portugal	3,413	1,944
Roumania	....	27
Russia in Europe	3,258	3,236
Spain	3,273	3,672
Sweden	9,470	9,583
Switzerland	1,399	1,340
Turkey in Europe	1,621	583
United Kingdom—		
England	395,199	418,333
Scotland	8,995	9,967
Ireland	1,199	2,547
North America:		
Bermuda	3,122	4,271
British Honduras	4,155	4,522
Canada	1,874,798	1,674,857
Central American States—		
Costa Rica	9,189	9,695
Guatemala	7,543	5,654
Honduras	4,471	5,714
Nicaragua	4,471	4,130
Panama	44,330	58,953
Salvador	3,133	3,642
Mexico	142,588	71,654
Miquelon, Langley, etc.	165	446
Newf'l'd and Labrador	6,672	10,122
West Indies—		
British—		
Barbados	1,184	557
Jamaica	10,949	6,867
Trinidad and Tobago	1,002	1,808
Other British	4,908	4,191
Cuba	187,384	189,486
Danish	1,092	1,516
Dutch	982	1,021
French	218	120
Haiti	5,802	2,583
Santo Domingo	7,122	11,623
South America:		
Argentina	71,263	76,400
Bolivia	1,077	1,087
Brazil	43,124	39,602
Chile	19,351	18,439
Colombia	8,709	9,880
Ecuador	5,733	4,659
Guiana—		
British	963	524
Dutch	261	257
French	15	....
Paraguay	135	149
Peru	13,367	11,474
Uruguay	6,027	7,054
Venezuela	5,243	5,053
Asia:		
China	11,486	27,188
China, leased territory—		
British	1,364	....
Japanese	250	....
Chosen	1,668	867
East Indies—		
British—		
British India	17,048	19,194
Straits Settlements	1,012	2,043
Other British	2,355	998
Dutch	1,438	3,400
French	240	6
Hongkong	8,923	6,188
Japan	87,431	55,764
Persia	....	25
Russia in Asia	209	54
Siam	322	114
Turkey in Asia	377	489

EXPORTS OF PAPER, ETC., FISCAL YEARS 1913 AND 1914—Continued.

Articles and countries.	1913	1914
PAPER, AND MANUFACTURES OF—continued.		
All other paper—Continued.		
Oceania:		
British—		
Australia and Tasmania	$155,285	$136,598
New Zealand	42,941	40,150
Other British	26	20
French	1,415	1,169
German	263	136
Philippine Islands	110,601	167,602
Africa:		
British Africa—		
West		14
South	14,903	14,549
East	54	156
Canary Islands	7	
Egypt	383	273
PAPER, AND MANUFACTURES OF—continued.		
All other paper—Continued.		
Africa—Continued.		
French Africa		$18
German Africa		74
Liberia	$34	34
Portuguese Africa	637	745
Total	3,520,109	3,351,689
Recapitulation:		
Europe	558,889	625,721
North America	2,325,280	2,073,432
South America	175,268	174,668
Asia	134,123	116,330
Oceania	310,531	345,675
Africa	16,018	15,863

EXPORTS OF PAPER, ETC., EIGHT MONTHS ENDING FEBRUARY.

	1913	1914	1915
Books, music, maps, engravings, etchings, photographs, and other printed matter:			
United Kingdom	$1,123,359	$1,030,703	$915,646
Canada	3,478,970	3,344,311	2,922,884
Mexico	155,338	210,050	127,959
Cuba	155,467	174,306	169,351
Brazil	195,055	168,937	115,209
British Oceania	243,068	284,751	343,670
Philippine Islands	134,398	194,118	173,332
Other countries	1,342,360	1,069,250	851,996
Total	6,828,015	6,496,426	5,620,047
Printing paper, news print:			
United Kingdom	119,387	70,219	387,276
Canada	106,386	108,051	5,530
Mexico	24,689	4,189	43,538
Cuba	141,249	161,499	159,765
Argentina	510,023	310,702	465,911
Chile	45,521	28,640	83,543
Australia and Tasmania	587,981	435,607	693,484
Other countries	182,284	135,315	368,025
Total	1,717,520	1,254,222	2,207,072

APPENDIX II.

The following are the trade customs in the paper trade of the United States, as adopted and announced by the American Paper and Pulp Association and its divisional associations. The lines of manufacturing affected are coated box boards, coated cardboards, coated paper, book paper, cover paper, writing paper, and wrapping paper. (Dimensions, when not otherwise indicated, are in inches.)

COATED BOX BOARDS.

1. Terms of all sales to be on basis of cash at any time within 30 days from average date of invoice, less a discount not to exceed 3 per cent.
2. Standard colors are as follows: White, yellow, chocolate, salmon, light blue, dark blue, pink, light green, dark green, red, orange, cardinal.
3. The regular size and thickness for coated box board is 28 by 44, 0.016 points.

4. (*a*) The minimum quantity for odd colors and sizes other than 28 by 44, at regular base price, will be the equivalent of 5,000 sheets 28 by 44. (*b*) An additional charge of not less than 10 per cent shall be made for special colors or sizes, for quantities less than the equivalent of 5,000 sheets 28 by 44.

5. A variation of not more than one point above or below the ordered weight shall constitute a good delivery.

6. Orders for sizes and colors other than regular shall be subject to overruns as follows: 1 ton to 10,000 sheets in size ordered, 20 per cent of quantity ordered; over 10,000 and up to 20,000 sheets in size ordered, 15 per cent of quantity ordered; over 20,000 and up to 30,000 sheets in size ordered, 10 per cent of quantity ordered; over 30,000 sheets and upward in size ordered, 7½ per cent of quantity ordered.

7. Extra charges to be as follows, basis 1,000 sheets 28 by 44, added to price of single white coated one side: White double coated one side, not less than $4; white double coated two sides, not less than $14; white double coated face, single coated back, not less than $10; white single coated two sides, not less than $6; light colors, each side, not less than $1; cardinal, maroon, and other dark colors, each side, not less than $3; brush finish, each side, not less than $4; waterproof coating, each side, not less than $4; export cases, not less than 2½ per cent; trimming one side and one end, not less than 3 per cent; trimming all four sides, not less than 5 per cent.

8. Customer to make claim for damaged board must report immediately to the manufacturer in order that goods may be inspected before printed, cut, or made into boxes.

9. No waste to be returned or board taken back unless damaged before delivery.

10. No allowance made for board cut, printed, or made into boxes.

COATED CARDBOARDS.

1. Terms of all sales to be on basis of cash at any time within 30 days from average date of invoice, less discount not to exceed 3 per cent.

2. The standard thickness of the various plys is as follows: Coated blanks—3 ply, 0.015; 4 ply, 0.018; 5 ply, 0.021; 6 ply, 0.025; 8 ply, 0.030; 10 ply, 0.040; 12 ply, 0.044; 14 ply, 0.048. Tough check—3 ply, 0.012; 4 ply, 0.018; 6 ply, 0.024; 8 ply, 0.030. Thick china—0.011. Translucent—0.010 to 0.020. Railroads—4 ply, 0.018; 6 ply, 0.024; 8 ply, 0.030.

3. Regular sizes of cardboard: Blanks, 22 by 28 and 28 by 44; car-sign blanks, 22 by 42; post card and translucent, 22 by 28 and 22½ by 28½, or double these sizes; railroad, tough check, and thick china, 22 by 28.

4. Minimum quantity for odd sizes at regular base price to be the equivalent of 10,000 sheets 22 by 28.

5. An additional charge of not less than 10 per cent to be added to base price for odd sizes, equivalent to less than 10,000 sheets 22 by 28. No orders for odd sizes accepted for less than the equivalent of 5,000 sheets 22 by 28.

6. Odd size orders shall be subject to overruns, as follows: 5,000 to 15,000 sheets of size ordered, 15 per cent of quantity ordered; over 15,000 and up to 30,000 of size ordered, 10 per cent of quantity ordered; 30,000 sheets and upward of size ordered, 7½ per cent of quantity ordered.

7. A variation of not more than one point above or below the ordered thickness in 3, 4, 5, and 6 ply, or any board of less than 0.030 points in thickness; two points in 8 and 10 ply, and above 10 ply, 5 per cent shall constitute a good delivery.

8. An additional charge of not less than 3 cents per package will be made for sealing all sizes larger than 22½ by 28½.

9. The charge for each extra coating to be added to the price of single coated one side, as follows: White single coated two sides, add not less than $2 per 1,000 sheets 22 by 28; white double coated one side, add not less than $2 per 1,000 sheets 22 by 28; white double coated face, single coated back, add not less than $5 per 1,000 sheets 22 by 28; white double coated two sides, add not less than $8 per 1,000 sheets 22 by 28.

10. Tints other than white on blanks, post card, and translucent, not less than 50 cents per 1,000 sheets 22 by 28 additional for each side coated. Prices for colors in deep shades quoted on application.

11. No waste to be returned or board taken back unless damaged before delivery. No claim allowed if board is cut, printed, or lithographed.

12. Customer to make claim for damaged paper must report immediately to the manufacturer in order that goods may be inspected before printed or cut.

COATED PAPER.

1. Terms of all sales to be on a basis of cash within 30 days from average date of monthly invoices less a discount not exceeding 3 per cent.

2. Minimum basis of weight for coated book (coated two sides) to be 25 by 38, 70 pounds to 500 sheets. For lighter weight extra cost of manufacture to be added, estimated at not less than 5 cents per 100 pounds for every pound or fraction thereof below the minimum.

3. Minimum basis of weight for coated lithograph and label (coated one side) to be 25 by 38, 60 pounds to 500 sheets. For lighter weight extra cost of manufacture to be added, estimated at not less than 5 cents per 100 pounds for every pound or fraction thereof below the minimum.

4. An additional price of not less than one-half cent per pound shall be charged for all making orders of less than 5,000 pounds one size and weight.

5. All papers shall be stenciled and billed at the ordered weight per ream where variation is not in excess of 5 per cent above or below. Paper within these limits to constitute a good delivery. All paper in excess of 5 per cent under the ordered weight shall be stenciled at its actual weight and be charged accordingly, if accepted.

6. In all cases of both sheet and roll orders, case linings, wrappers, and twine shall constitute a part of the ream weight of the paper not exceeding 2 per cent.

7. Special making orders shall be accepted subject to overruns as follows: Under 2½ tons, 20 per cent; 2½ to 5 tons, 15 per cent; 5 to 10 tons, 10 per cent; over 10 tons, 5 per cent.

8. No printed waste to be returned and no paper taken back unless damaged before delivery. In case customer desires to make claim for damaged paper, report must be made immediately to the manufacturer, in order that the paper may be inspected before it is printed or cut.

9. For all paper of any shade other than white or light natural the extra cost thereof, estimated at not less than 50 cents per 100 pounds, shall be added to the base selling price (coated one or two sides).

10. For wrapping and sealing in packages the extra cost thereof, estimated at not less than 10 cents per 100 pounds, shall be added to the base selling price.

BOOK PAPER.

Terms.—All sales to be on a basis of 30 days less 3 per cent.

Prices.—The base selling price shall be for paper unpacked, in rolls or sheets.

Claims.—Damaged paper must be reported and claims entered immediately, so that it may be inspected before used.

Cost of packing.—Additional cost of packing to be added, as follows: Rolls of not less than 500 pounds net of paper, wrappers not to exceed 3 per cent of billing weight, 5 cents per 100 pounds; rolls of less than 500 pounds net of paper and not less than 250 pounds, wrappers not to exceed 3 per cent of billing weight, 10 cents per 100 pounds; rolls protected by wooden heads and rods, containing not less than 500 pounds net of paper, wrappers not to exceed 3 per cent of billing weight, 15 cents per 100 pounds; sheets in interlapped bundles of not less than 150 pounds of paper net, wrappers and twine not to exceed 3 per cent of billing weight, 10 cents per 100 pounds; in cases not less than 550 pounds of paper net, case linings not to exceed 1 per cent of billing weight, 25 cents per 100 pounds; in skeleton frames containing not less than 150 pounds net of paper, wrappers and twine not to exceed 2 per cent of billing weight, 25 cents per 100 pounds; in solid board frames not less than 180 pounds net of paper, wrappers and twine not to exceed 2 per cent of billing weight, 40 cents per 100 pounds.

Weights.—Wrappers, case linings, and twine shall not be included in the scale or ream weight at which the paper is charged to purchaser.

To be as close as possible to the weight ordered, subject to a possible variation in the nominal weight not exceeding 5 per cent above or below the ordered weight. Paper within this range to constitute a good delivery.

To be stenciled with the weight made, so marked by the manufacturer, and there shall be no evasion by substituting letters or symbols for figures.

Weight ordered to be billed, unless shortage is in excess of 2½ per cent, in which case it shall be billed at actual scale weight.

Additional charge for light weights.—Minimum basis of weight to be as follows: Machine finish, 25 by 38, 45 pounds to 500 sheets. For lighter weight the extra cost of manufacturing to be added according to weight, estimated as follows: For each pound below 25 by 38, 45 pounds, to and including 25 by 38, 40 pounds to 500 sheets, 3 cents per 100 pounds; for each pound below 25 by 38, 40 pounds, to and including 25 by 38, 30 pounds to 500 sheets, 5 cents per 100 pounds; for each pound below 25 by 38, 30 pounds to 500 sheets, 10 cents per 100 pounds.

Supercalendered, 25 by 38, 50 pounds to 500 sheets. For lighter weight the extra cost of manufacture to be added according to weight, estimated as follows: For each pound below 25 by 38, 50 pounds, to and including 25 by 38, 45 pounds to 500 sheets, 3 cents per 100 pounds; for each pound below 25 by 38, 45 pounds, to and including 25 by 38, 35 pounds to 500 sheets, 5 cents per 100 pounds; for each pound below 25 by 38, 35 pounds to 500 sheets, 10 cents per 100 pounds.

Special making orders.—Lots of less than 2½ tons to be charged at 25 cents per 100 pounds over and above the base selling price.

Heads, rods, and cores.—To be charged at cost, and if returned, customer to be credited with the same at the price charged, the manufacturer to bear the cost of return freight on same.

Waste.—No printed waste to be returned and no paper taken back unless damaged before delivery. Paper on cores returned is not to be allowed for, except at the price of clean white waste. In billing paper no allowance to be made for waste.

Color.—Any shade other than white or natural to be charged for at not less than 25 cents per 100 pounds, in addition to the base selling price.

Cutting.—Trimming paper: The cost thereof, estimated at not less than 10 cents per 100 pounds, shall be added to the base selling price. Wrapping: Wrapping in reams, the cost thereof, estimated at not less than 10 cents per 100 pounds, to be added to the base selling price.

Variations in quantity ordered.—Overruns or underruns must be accepted subject to the following possible variations: Less than 2 tons, 15 per cent over or under; 2 to 5 tons, 10 per cent over or under; 5 to 20 tons, 5 per cent over or under; 20 tons and upward, 3 per cent over or under.

COVER PAPER.

1. On plain standard covers the following shall be considered "regular" sizes and weights; all others shall be considered "special:" 20 by 25, 25, 35, 50, and 65 pounds; 25 by 40, 50, 70, and 100 pounds; 22 by 28, 35, 50, 60, and 70 pounds. On weights lighter than basis of 20 by 25, 25 pounds, an additional charge shall be made of 10 cents per 100 pounds for each pound per ream below that basis.
2. On special sizes or special weights not less than 10 per cent additional price for lots of less than 1 ton.
3. On special colors, or colors not regularly made in the grade ordered, ton lots or less, not less than 10 per cent additional price.
4. On special orders for 1 ton or less, overruns not greater than 15 per cent to be taken by customers. On orders for more than 1 ton overruns not greater than 10 per cent to be taken by customers.
5. Orders for less than a full package or bundle not less than 10 per cent additional.
6. No paper to be made one weight and stenciled another. Paper to be marked by manufacturers the ream weight ordered, and there shall be no evasion by substituting letters or symbols for figures.
7. The average actual weight, including wrappers, not to exceed 2½ per cent above or below the nominal weight. Paper within this weight to constitute a good delivery and to be billed at nominal weight. The above to be based on items of one size, weight, and color on individual invoices.
8. No claims allowed after paper is cut or printed.
9. All goods to be billed when ready or at accepted date for shipment and to be settled for at the usual time whether ordered shipped or not.

(Paragraph 1 applies to plain standard covers only; other paragraphs apply to all grades of cover.)

WRITING PAPER.

1. On special sizes not less than 10 per cent additional price for lots of less than 1 ton. The following sizes may be considered as regular:

Flats and bonds: 14 by 17, 17 by 28, 28 by 24, 16 by 21, 21 by 32, 16 by 26, 17 by 22, 22 by 34, 26 by 34, 19 by 24, 24 by 38, 19 by 26, 26 by 38, 19 by 28, 28 by 38, 19 by 30, 17 by 26, 18 by 23, 23 by 36, 21 by 33, 30 by 38, 20 by 28, 28 by 40, 28 by 42½.

Ledgers: 14 by 17, 17 by 28, 28 by 34, 15 by 19, 19 by 30, 16 by 21, 21 by 32, 16 by 42, 17 by 22, 22 by 34, 18 by 23, 23 by 36, 18 by 46, 19 by 24, 19 by 48, 24 by 38, 20 by 28, 28 by 40.

NOTE A.—Any of the above sizes not regularly stocked by the mill in the grade ordered may be considered special sizes, but these and any other sizes may be considered regular if stocked by the mill or buyer, but all special orders for sizes other than those mentioned, unless regularly stocked, shall be billed at 10 r cent additional in lots less than 1 ton.

2. On special colors, or colors not regularly made in the grade ordered, ton lots or less, not less than 10 per cent additional price. One to 2 tons not less than 5 per cent additional.

NOTE B.—(Applying to rules Nos. 1 and 2.) Under rules Nos. 1 and 2 the quantities mentioned are understood to be the quantities named in the original order or inquiry and not the quantities that may be arrived at by adding the 10 or 15 per cent overrun provided for under rule No. 3. For example, an order for, say 1,900 pounds, is an order for less than 1 ton and is to be accepted and billed at the 10 per cent advance although when made the allowed overrun may make the shipment aggregate more than 2,000 pounds.

NOTE C.—(Applying to rule No. 2.) Under this rule (rule No. 2) mills may make in any established grade for a customer buying said grade regularly, without additional charge, such colors as may be decided upon as constituting the regular colors of such customer's line.

3. On special orders of 1 ton or less, overruns not greater than 15 per cent to be taken by customers. On orders for more than 1 ton, overruns not greater than 10 per cent to be taken by customer.
4. Orders for less than a full package, not less than 10 per cent additional.
5. No paper made one weight and stenciled another.
6. The average actual weight, including wrappers, not to exceed 2½ per cent above or below the nominal weight. Paper within this range to constitute a good delivery and to be billed at the nominal weight. The above to be based on items of one size and weight on individual invoices.
7. No claims allowed after paper is cut, ruled, or printed.

NOTE D.—(Applying to rule No. 7.) Experience has shown that exceptional cases occasionally arise where the fault is clearly with the mill and where an absolutely literal enforcement of rule No. 7 would work injustice and hardship to the jobbers. It is therefore understood that mills will enforce the spirit of this rule, deciding exceptional cases upon their merits and according to the rules of equity.

8. No paper of private watermarks or brands to be supplied for sampling purposes nor allowance made on account of advertising such watermarks or brands.
9. All "make and hold" orders must specify an ultimate date for shipment, at which date goods are to be billed and the invoices taken to account by customer whether ordered shipped or not.
10. A charge of not less than 1½ cents per pound for folding in ream bundles, and not less than 2 cents per pound for quarter reams and pound packages. A charge of not less than one-half cent per pound to be made for faint ruling, such as letterheads, etc., and not less than 1 cent per pound for struck ruling, such as billheads, statements, etc.
11. Jobbers or manufacturers desiring special watermarks for their customers must pay the cost of dandy roll, and no credit will be given on account of the number of cases ordered.
12. For weights lighter than basis, 17 by 22, 16 pounds to 500 sheets, an additional price to be charged.

WRAPPING PAPER.

1. Terms net cash 30 days from date of invoice, or 2 per cent discount if paid within 15 days.
2. All orders for wrapping paper are accepted for wrapping purposes only, unless otherwise specifically stated.
3. All wrapping paper will be made on a basis of 24 by 36, 480 sheets only.
4. All wrapping paper to be billed at actual scale weight, including twine and wrappers, with a leeway of 5 per cent over or under ordered weight. All cores, except iron, to be charged for and not returnable.
5. No paper to be made one weight and stenciled another.
6. No. 1 manila: The standard basis of weight on No. 1 manila shall be 35 pounds per ream of 480 sheets. Weights from 30 to 34 pounds, inclusive, shall be 12½ cents per hundredweight additional, and from 25 to 29 pounds, inclusive, shall be 50 cents per hundredweight additional above basis price.
7. No. 2 manila: The standard basis of weight on No. 2 manila shall be 35 pounds per ream of 480 sheets. Weights from 30 to 34 pounds, inclusive, shall be 10 cents per hundredweight additional, and from 25 to 29 pounds, inclusive, shall be 50 cents per hundredweight additional above basis price.
8. Dry-finish papers: Standard basis of weight for dry-finish wrapping paper shall be 35 pounds per ream of 480 sheets. Weights from 30 to 34 pounds, inclusive, shall be 12½ cents per hundredweight additional. Weights from 25 to 29 pounds, inclusive, shall be 50 cents per hundredweight additional. Weights from 20 to 24 pounds, inclusive, shall be $1 per hundredweight additional.
9. Water-finish papers: The standard basis of weight on No. 1 water-finish fiber papers shall be 40 pounds per ream of 480 sheets. Weights from 35 to 39 pounds, inclusive, shall be 15 cents additional above basis price.

10. Colors: No colors for less than 25 cents per hundredweight additional above basis price.

11. Sheets 150 square inches and over, 10 cents per hundredweight additional; sheets under 150 square inches, 25 cents per hundredweight additional.

12. Skeleton frames, 10 cents per hundredweight additional.

13. Tight frames, 20 cents per hundredweight additional.

14. Cases not less than 400 pounds, 25 cents per hundredweight, and no case to be less than $1.

15. Rolls: Basis dimensions, 9 inches diameter or greater, 6 inches width or greater.

16. Small rolls: 4 inches width and less than 6 inches, advance 25 cents per hundredweight; 2 inches width and less than 4 inches, advance 50 cents per hundredweight; 1 inch width and less than 2 inches, advance 75 cents per hundredweight; 6 inches diameter and less than 9 inches, advance 25 cents per hundredweight; 4 inches diameter and less than 6 inches, advance 50 cents per hundredweight; 2 inches diameter and less than 4 inches, advance 75 cents per hundredweight.

Blasting rolls: 5 pounds and heavier, advance 25 cents per hundredweight; 4 pounds and heavier, advance 35 cents per hundredweight; 3 pounds and heavier, advance 45 cents per hundredweight; 2 pounds and heavier, advance 55 cents per hundredweight; 1 pound and heavier, advance 65 cents per hundredweight. Fractional weights take advance of next lower weight.

17. Less-than-carload shipments shall take an f. o. b. mill price of 10 cents per hundredweight less than the delivered carload price.

18. Orders accepted subject to delays brought about by strikes, accidents, fires, or other causes beyond the control of the manufacturers.

APPENDIX III.

The Bureau of Standards of the Department of Commerce has issued an elaborate circular (No. 45) relative to the testing of materials. The following portions refer to paper and are here included for the use of the paper manufacturers of the United States:

TESTING OF PAPER.

(1) *Definition and sources.*—Paper is a matted felting of fibers, usually of vegetable origin, made into flat sheets for printing, wrapping, writing, and other purposes. Paper is produced from a very wide range of sources, since it is possible to produce a sheet of paper from almost any fibrous vegetable material. The most important sources are:

1. Seed hair fiber, such as cotton.
2. Bast or stem fibers, such as flax or linen, hemp, jute, straw.
3. Leaf fibers, such as manila hemp.
4. Wood fibers: (*a*) Resinous woods—spruce, pine, hemlock; (*b*) nonresinous woods—beech, gum, poplar.

Of these various sources, the most important are rag (cotton and linen), woods of pine family, and woods of the poplar family.

(2) *Uses.*—The uses to which paper may be put are even more varied than the sources. As usually known, in the form of thin sheets it is principally used for writing printing, or wrapping, and a great variety of special uses. In other manufactured forms its uses are almost numberless for making substitutes for metal, wood, rubber, horn, and ivory, and as material for making the stiff backs of books, for making yarn to be spun into cloth, for making artificial silk, coverings for walls, boxes, books, etc., and recently for towels, table coverings, dishes, etc.

(3) *Quality.*—The suitability of a paper for a definite purpose depends upon, first, the kind and quality of the raw material entering into its composition; second, the degree of care with which a paper is made; and third, the absence in the finished product of any material or materials detrimental to its life or usefulness. In order that the user may more correctly judge a paper and determine its usefulness for the purpose intended, he should be informed upon the following points:

1. The fiber composition (with per cent of various kinds contained therein).
2. The bursting strength.
3. Tensile strength.
4. Folding endurance.
5. Thickness.
6. Weight per standard ream.
7. Ratio of strength to weight.

8. Per cent of filler retained in the paper, kind and per cent of sizing material used.
9. Presence of any material detrimental to the life of paper.

The above influencing factors alone do not in every case control the quality of a paper, since even with the best of raw materials the paper may be of very low quality, due to careless handling during the process of manufacture. There are still other important properties that affect the quality of a paper, such as "opacity," "color," "finish," "formation," "dirt," "rattle," and the "feel" of a paper.

It should be understood that every paper does not require a full test to enable one to judge quality. For example, a wrapping paper for best quality should have a high bursting and a high folding strength and a resistance to water or dampness. These are the controlling factors, while for a high-grade chart paper every test that may be applied is of importance, for such a paper must stand much handling, a wide range of atmospheric conditions, and the most severe printing requirements.

The following is a list of tests and determinations to be made with corresponding characteristics which each test helps to determine:

1. Microscopical examination, to determine fiber composition and show the presence of injurious fibers.
2. Bursting strength, tensile strength, and folding endurance, to determine quality of material used and care in handling during process of manufacture.
3. Weight per ream, to determine compliance with contract specification.
4. Thickness to determine bulk.
5. Expansion and absorption, to determine resistance to changes due to moisture.
6. Per cent of ash, to determine kind and amount of loading material.
7. Per cent of sizing, to determine kind and amount of sizing materials used.

(4) *Sampling.*—The following should be noted in regard to submitting samples for test. Whenever possible nine sheets each, accurately cut, 10 by 12½ inches should be submitted. These sheets should be picked out in such a manner as will most nearly represent an average of the total amount delivered. The nine sheets of each lot should be carefully fastened together, and one outside sheet should be marked according to one of the following forms:

Samples submitted by Government departments should be marked in upper left-hand corner of sheet as follows:

Date ...... Identification marks......
Submitted by
Kind of paper
Item number
Name of manufacturer
Tests for compliance with schedule.
Remarks: (Any other information concerning the paper.)

Samples submitted by private parties, mark in upper left-hand corner of sheet as follows:

Date ...... Identification marks......
Submitted by
Kind of paper
Use of paper
Ream size and weight
Tests required
Remarks: (Any other information concerning the paper.)
Paper made by ......

NOTE.—In order to secure representative samples for test, it is advisable to proceed as follows: Case lots.—Select one case from each one-third of the total delivery, and then select one sheet from each one-third of the case. Mark large sheets Nos. 1 to 9, inclusive, and from the large sheets cut 10 by 12½ inch sheets for test, also save remaining portion of large sheet for record purpose. Deliveries in "frames" and bundles are to be sampled in the same way. Deliveries in small boxes or small packages, when possible, should be sampled by selecting one sheet from each of nine boxes. Rolls.—Sample by taking one sample each from nine rolls not less than four sheets in from outside of roll. If not practical to do this, then select three sheets from each of the rolls.

A careful record should be kept by the sender so that the identification marks may be used in the certificate to avoid repeating the detailed description of the paper.

All samples of paper should be put up for shipment carefully protected by cardboard or other material to insure arrival in good condition. All paper samples themselves should be plainly marked "For Paper Testing Laboratory, Bureau of Standards, Washington, D. C."

The Bureau is equipped to make complete examination of papers for Government offices or bureaus, and will, in its discretion, perform similar service for the general public when asked to act as referee or where the nature of the case calls for an authoritative test. The Bureau thus reserves the right to accept or decline requests for tests, depending upon the conditions in each instance.

All tests for the National and State Governments are made free of charge. For municipal governments or private parties charges are made according to the nature and extent of the work required. Where such tests are accepted, the fees will in general be based upon the following schedule, which states the fee for each test on a single sample, and the charge for the same test on each additional sample where several samples are submitted at the same time.

Details of the methods of testing and the significance of the results will be given in a special circular, to be issued in the near future, upon the testing of paper.

FEE SCHEDULE 212—PAPER.

	First sample.	Each additional sample.
(*a*) Microscopical examination (fiber content of stock)	$1.50	$0.75
(*b*) Bursting strength	.50	.25
(*c*) Weight per ream	.25	.25
(*d*) Thickness	.25	.25
(*e*) Tensile strength	.50	.25
(*f*) Folding endurance	1.00	1.00
(*g*) Percentage of ash	1.00	.50
(*h*) Percentage of rosin	1.50	1.00
(*i*) Test for presence of animal size	.50	.25
(*j*) Percentage of animal size	2.50	2.00
(*k*) Absorptive capacity papers	1.00	.50

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DEPARTMENT OF COMMERCE
BUREAU OF FOREIGN AND DOMESTIC COMMERCE
E. E. PRATT, Chief

SPECIAL CONSULAR REPORTS—No. 75

FOREIGN TRADE IN BUTTONS

WASHINGTON
GOVERNMENT PRINTING OFFICE
1916

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LETTER OF SUBMITTAL.

DEPARTMENT OF COMMERCE,
BUREAU OF FOREIGN AND DOMESTIC COMMERCE,
Washington, D. C., April 1, 1916.

SIR: There is submitted herewith a report upon the foreign trade in buttons, based upon a series of consular reports obtained in response to requests of American button manufacturers. Because of the fact that the normal European production of buttons, the largest in the world, is at present so seriously curtailed, the American export trade in this commodity shows an increase of 79 per cent in 1915 as compared with the previous year, and there are prospects of further expansion. It is believed, therefore, that the information contained in these reports, showing the approximate size and the requirements of the markets in practically all the important button-using countries in the world, will be of material assistance in extending the sales of American-made buttons abroad.

Lists of importing houses, agents, and dealers were also furnished by the consuls, and are appended to the text of the report. Samples of the buttons in vogue in the respective countries were likewise forwarded and will be available for inspection by interested firms.

Respectfully,

E. E. PRATT,
Chief of Bureau.

To Hon. WILLIAM C. REDFIELD,
Secretary of Commerce.

FOREIGN TRADE IN BUTTONS.

INTRODUCTION.

Under normal conditions, all the world, except the United States and Canada, buys buttons from Austria-Hungary, Germany, France, Italy, England, Japan, and, to a small extent, from Spain. The United States manufactures enough to meet about nine-tenths of its own requirements and more than half the supply of Canada, which has some factories of its own. Under present conditions, however, with the hitherto largest sources cut off, all the button-using countries of the world, except the central European empires, must depend more or less upon the manufacturers of the United States, Japan, Italy, and Spain, of which latter group the United States is far the largest producer.

American button manufacturers, realizing the probable existence of these conditions, applied to the Bureau of Foreign and Domestic Commerce for full information on the subject. In response to their requests the United States consular officers in foreign countries were called upon and their reports have been arriving during the past several months. Two hundred and seven consular districts, in 56 countries, are represented in the material now at hand.

Not all of the consular reports received, and in some instances only parts of those selected, are published, for the reason that trade conditions within a given country were frequently found to be so similar that the reports duplicated each other. Where this occurred the most representative reports were chosen for publication, to each of these being added any supplementary information reported from other districts in that country. The unpublished reports will be loaned by the Bureau to persons interested, for whose convenience a list is printed on page 144.

Samples of the buttons in vogue in the various countries were received with many of the consular reports, and these samples will be made available at the branch offices of this Bureau for inspection by any persons interested.

Detailed information in regard to the rates of duty on buttons in any foreign country may be obtained by application to the Bureau in Washington.

Lists of importers, agents, wholesalers, retail merchants, and trade users of buttons, furnished by the consuls, have been assembled at the end of this report.

Chapter I.—AMERICAN BUTTON TRADE.

OUTPUT OF AMERICAN FACTORIES.

The United States is one of the principal button-producing countries. The 1914 census of manufactures records a total output of buttons (including parts of buttons, button blanks and molds, and snap-fasteners) valued at $19,476,056. There were 517 button-manufacturing establishments, besides which 50 establishments engaged primarily in other industries produced buttons to the value of $482,061. The different kinds of buttons and the quantity and value of each are shown in the following table:

	Quantity.	Value.
	Gross.	
Agate	3,660	$5,100
Bone	2,198,946	329,934
Celluloid, plastic	623,169	724,354
Collar and cuff	1,771,053	56,251
Glass	217,224	100,201
Horn	537,096	299,487
Ivory	382,560	283,484
Metal, not including trouser or collar and cuff:		
Dress or uniform	257,823	283,352
All other	617,740	172,133
Pearl or shell:		
Fresh-water	21,664,436	4,879,844
Ocean	4,516,969	2,489,364
Shoe	15,520,037	610,796
Covered	3,017,436	1,600,178
Trouser:		
Steel	535,207	307,802
Other metal	252,248	44,150
Trouser—Continued.	*Gross.*	
Vegetable ivory	2,289,402	$1,326,227
Other composition	1,510,272	658,880
Vegetable ivory, not including trouser	2,838,603	1,559,276
Wood	1,831	2,522
Others, not specified	1,458,446	388,538
Parts of buttons	388,201	111,325
Blanks, or molds	14,304,148	2,349,412
Snap-fasteners (great gross):		
Steel	517,895	159,351
Other metal	641,151	252,034
Unclassified (produced incidentally)		482,061
Total value		19,476,056

As appears from the table, the manufacture of pearl buttons, chiefly fresh-water pearl, was the most important branch of the button industry, representing 43.2 per cent of the total quantity and 45.4 per cent of the total value of the output. Next in importance was the manufacture of buttons from vegetable ivory, the output of these amounting to 8.5 per cent of the quantity and 17.8 per cent of the value of the total button product.

IMPORTS.

Nearly all of the buttons manufactured in this country have been consumed by the home markets, and there were imports besides to the value of $2,082,029 in 1914, as shown by the statistics of commerce and navigation published by the Bureau of Foreign and Domestic Commerce. The sources of these imports and the comparative figures for 1914 and 1915 are of particular interest in view of the present condition of the world's trade. These data appear in the following tables:

Countries.	1914	1915
Austria-Hungary	$744,422	$330,378
France	293,583	111,244
Germany	812,424	308,665
Italy	12,630	13,849
Spain	99	1,195
England	$84,534	$39,963
Japan	127,966	196,484
Other countries	6,371	3,016
Total	2,082,029	1,004,794

Germany, Austria-Hungary, and France, it will be noted, supplied most of the buttons imported into the United States in 1914. England also furnished a considerable quantity. In 1915 the war conditions, which diminished the total imports to $1,004,794, affected the output of these four countries particularly, and gave Japan, Italy, and Spain opportunity to increase their sales to the United States.

EXPORTS.

The American export trade in buttons, which amounted to but $654,372 in 1914, more than half of which was with Canada, expanded to $1,171,232 in 1915, with England, Canada, Australia, and Cuba the largest purchasers. The following table shows the exports of buttons and parts of buttons from the United States in 1911, 1912, 1913, 1914, and 1915, by countries to which exported:

Countries.	1911	1912	1913	1914	1915
Europe:					
Austria-Hungary	$101	$135	$1,116	$293	$380
Belgium	280	3,825	6,677	5,499	....
Denmark	106	1,245	13,135	5,433	1,751
France	1,219	972	2,951	578	5,920
Germany	10,031	32,413	36,805	15,767	2,231
Greece	....	50	....	62	247
Italy	6	72	....	....	186
Netherlands	14,433	12,012	22,031	9,661	959
Norway	....	89	967	318	2,023
Portugal	....	....	....	....	1,632
Russia in Europe	539	528	457	....	....
Spain	....	....	402	226	467
Sweden	....	....	1,651	880	76
Switzerland	56	....	40	....	....
Turkey in Europe	162	....	....	577	....
United Kingdom—					
England	202,266	232,529	263,228	214,140	695,440
Scotland	705	2,954	5,072	4,401	12,434
Ireland	240	....	357	....	1,379
North America:					
Bermuda	144	325	217	162	145
British Honduras	106	87	44	70	53
Canada	250,433	351,660	425,757	332,976	363,688
Central American States—					
Costa Rica	181	318	111	47	540
Guatemala	556	626	740	36	424
Honduras	277	148	322	195	302
Nicaragua	612	577	194	352	246
Panama	2,826	3,201	3,447	3,825	2,819
Salvador	104	71	....	14	68
Mexico	6,242	7,278	6,235	4,668	7,927
Miquelon, Langley, etc	....	....	10	....	44
Newfoundland and Labrador	1,114	1,305	2,036	1,209	546
West Indies—					
British—					
Barbados	15	30	13	....	48
Jamaica	464	76	244	296	3,597
Trinidad and Tobago	....	106	....	24	187
Other British	147	173	120	199	400
Cuba	12,064	9,970	10,554	13,719	24,491
Danish	47	129	15	32	35
Dominican Republic	1,361	856	267	439	619
Dutch	11	....	....	68	6
French	36	22	....	33	19
Haiti	579	486	234	83	13
South America:					
Argentina	20,600	25,358	11,359	4,138	5,119
Bolivia	....	156	67	27	14
Brazil	9,811	11,191	12,003	2,235	2,491
Chile	310	220	104	1,121	1,197
Colombia	854	371	522	591	751
Ecuador	42	43	250	13	146
Guiana—					
British	....	21	....	....	159
Dutch	247	16	40	97	26
Peru	....	....	....	176	....
Uruguay	357	1,939	447	174	....
Venezuela	895	612	1,212	515	1,404

Countries.	1911	1912	1913	1914	1915
Asia:					
China	$2	$830	$492	$44	$25
East Indies—					
British—					
British India	42	....	....	409	546
Straits Settlements	....	....	....	92	72
Other British	....	18	....	40	....
Dutch	131	....	....	403	50
Hongkong	228	50	8	....	275
Japan	122	501	219	359	565
Russia in Asia	....	....	....	....	6
Turkey in Asia	....	200	....	72	....
Oceania:					
British—					
Australia	7,364	9,686	7,751	15,698	20,449
New Zealand	2,649	3,533	3,119	2,052	2,057
Other British	....	25	....	22	....
French	....	....	219	11	....
Philippine Islands	5,328	4,528	5,018	9,251	4,267
Africa:					
British Africa—South	60	217	403	502	259
French Africa	....	....	....	47	....
Liberia	....	1	....	1	12
Total	556,504	723,784	849,282	654,372	1,171,232
RECAPITULATION.					
Europe	230,143	286,824	355,489	257,835	725,125
North America	277,319	377,444	450,560	358,447	406,217
South America	33,116	39,927	26,004	9,087	11,307
Asia	525	1,599	719	1,419	1,539
Oceania	15,341	17,772	16,107	27,034	26,773
Africa	60	218	403	550	271

TRADE CONDITIONS.

These figures, both imports and exports, suggest the conditions of the industry abroad as described by the consuls. The button factories of France and England, taxed to their utmost by the unusual conditions, are unable to meet their home demands, and both countries, which are normally large importers as well as manufacturers, are now importing even more largely and for the most part from other than their usual sources of supply. In Italy the depression which followed the outbreak of the war has been dispelled by the stimulus of increased demand in all the markets formerly supplied by Austria and Germany. Spain also, which has manufactures of considerable importance but has hitherto exported relatively small quantities, is increasing its output and developing its foreign trade. Japan, which manufactured buttons almost entirely for foreign consumption, having a very small market at home, is naturally putting forth extraordinary efforts to secure new markets.

It appears from the various consular reports on the subject that American button manufacturers should find markets not only in several of the neutral European countries but in England and France and their colonies; especially, of the latter, Australia and South Africa. Denmark, the Netherlands, Norway, and Spain seem also to offer opportunity. In all these fields, however, Italy and Japan are strong competitors, with Spain advancing. In South and Central America and the West Indies the markets are not individually large, but in most of them the trend of the trade is said to be with America rather than Italy or Japan.

Chapter II.—NORTH AMERICA.

CANADA.

Consul General John G. Foster, Ottawa.

The manufacture of buttons in Canada has never reached very large proportions, and the exports, of course, are likewise small, being but $4,532 in 1914 and $3,165 in 1915, of which the greater part were reexports. The principal factories are located at Berlin, Waterloo, Toronto, and Ganonoque, in the Province of Ontario, and at Montreal, in the Province of Quebec.

The imports for consumption amounted to $871,181 in the fiscal year 1914 and $566,439 in 1915; the United States furnished more than 53 per cent in 1914 and 64 per cent in 1915. The imports of buttons and button materials are shown by countries in the following table:

Countries.	1914	1915	Countries.	1914	1915
Austria-Hungary	$69,314	$17,792	United States	$465,021	$366,755
France	34,629	10,289	Other countries	28,764	13,521
Germany	84,009	19,797			
Japan	44,292	50,273	Total	871,181	566,439
United Kingdom	145,152	88,012			

The imports of buttons for consumption were classified as follows:

Classes.	1914	1915	Classes.	1914	1915
Button blanks and animal shell, in the rough	$29,195	$8,788			
Buttons of all kinds, covered or not, not otherwise provided for, including recognition buttons and collar and cuff buttons	811,814	519,780			
Buttons of vegetable ivory	....	15,515	Lastings, mohair cloth, or other manufactures of cloth, woven or made in patterns of such size, shape, or form, or cut in such manner as to be fit only for covering buttons, imported for manufacture of buttons	$9,898	$4,943
Buttons, shoe, papier-maché	17,500	16,021			
Buttons, shoe, not otherwise provided for	2,744	1,392	Total	871,181	566,439

The following table gives the button imports subject to duty entered for consumption at 18 Canadian customs ports during the fiscal years 1914 and 1915, and shows also the total imports which entered free. The principal importers are in Montreal and Toronto.

Ports.	1914	1915	Ports.	1914	1915
Brantford	$863	$653	Vancouver	$14,193	$11,480
Calgary	3,388	1,831	Victoria	4,373	1,983
Dawson	44	93	Windsor	34,054	13,028
Halifax	3,861	2,756	Winnipeg	38,163	31,891
Hamilton	12,204	16,108			
London	6,621	4,047	Total, 18 ports	777,110	498,559
Montreal	299,249	205,188	Other ports	66,673	46,916
Ottawa	6,698	4,759			
Quebec	16,868	10,155	Total dutiable	843,783	545,475
Sault Ste. Marie	197	139	Total free	27,398	20,964
St. John, New Brunswick	8,667	3,933			
St. Johns, Province of Quebec	9,136	7,216			
Sydney	229	127	Total button imports for consumption	871,181	566,439
Toronto	311,302	183,222			

Shoe buttons of papier-maché are subject only to the war tax of 5 per cent under the British preferential and 7½ per cent under the general tariff. The customs duties (inclusive of the war tax) on shoe buttons not otherwise provided for are 22½ per cent British preferential and 32½ general tariff. Button blanks of animal shell in the rough are dutiable at 12½ and 17½ per cent, respectively. Buttons of all kinds, covered or not, not otherwise provided for, including recognition buttons and cuff or collar buttons, are dutiable at 27½ and 42½ per cent.

MONTREAL.

Consul General William Harrison Bradley.

Since the beginning of the war England has replaced Germany's former trade with Canada to a greater extent than has the United States, and though at present the larger part of the cuff links, studs, and shirt buttons comes to this consular district from the United States, the better classes of studs are imported direct from England. The reason for this is said to be that buttons—for shirts and collars, for instance—imported from England have a pearl back or inset which does not stain or gather dirt. Manufacturers in the United States have tried to compete in this line, but have not yet met with much success against the English.

Information that the large department stores here do their buying direct confirms the advice of the head of one of the best-known dry goods stores in Montreal to the effect that agents coming here should be able to deliver large quantities on a few days' notice, and at the same time be willing to ship fancy goods in small lots as the styles change. At present there are said to be goods in store for next summer's consumption.

The war in Europe has brought into existence in Canada a number of companies which manufacture solely for military equipment. These firms import the raw material from England, paying the 5 per cent war tax and the duty in preference to 7½ per cent and the duty on the same material from the United States.

The buttons manufactured in this section are nearly all of hand crochet, mohair, or celluloid, and the so-called button manufacturers of Montreal are largely braid, cord, or tassel makers, who expend from one-fifth to one-quarter of their entire time and force on the production of buttons of the cloth-covered core type.

The buttons for women's apparel are said to be subject to fitful importation only, owing to the rapidly changing styles. Importers say that the proximity of the United States makes it easy to get shipments of buttons through the customs, and one man states that frequently but 48 hours elapse from the time a box leaves the warehouse in New York to the time it is opened for consumption in Montreal.

OTTAWA.

Vice Consul C. Gaylord Marsh.

Buttons are used in this consular district to the same extent as in similar sections of the United States, the same materials being preferred and the same styles predominating. Practically all the buttons in use in Canada at present are imported from the United States and Japan or are manufactured in Canada. The imports from

Japan are principally of the salt-water pearl type. The buttons of Canadian manufacture are of bone, metal, and composition. Most buttons are sold by department stores for home use and tailoring, as local clothing factories produce only rough garments.

Importation is usually direct through purchases made from samples shown by traveling salesmen. In some cases retailers have sent buyers to other countries to make purchases. The most usual terms appear to be 2½ per cent, 30 days, and net cash.

Fancy buttons of celluloid and pearl were formerly drawn to a large extent from Germany and France. Importations from the former country have now been prohibited, and great difficulty is experienced in having orders filled in France, so that importers are looking to the United States to supply this type. If American manufacturers avail themselves of this opportunity and establish their products in this market it would seem, for obvious reasons, that a goodly portion of the trade might be retained indefinitely.

QUEBEC.

Consul G. Willrich.

The use of buttons in this section is probably as extensive as in a city of the same size in the United States. The buttons used are practically the same as those in vogue in the United States, since the larger portion is purchased there, the remainder being manufactured in Canada or imported from France, England, and Japan.

The buttons imported from France and England include what is known as "agate," a plain flat white button made of stone, with four holes and about one-half inch in diameter. This is the only button that dealers have not been able to purchase in the United States. Other types handled are pearl from France and Japan and metal, fancy, and composition buttons from the United States. There are no buttons manufactured in this district.

The proportion of imports into Quebec compared with those into Montreal (see p. 11) substantiates the fact that the greater part of the buttons used in this district are obtained through Montreal houses, as the amounts shown for Quebec in the above figures do not represent the total value of the buttons used in this district.

No dealers here buy direct from Europe, except one whose buyer has visited the Continent annually, and in purchasing other lines has also bought any buttons there which he knew could not be procured elsewhere. This trade, however, has been cut off now on account of the war, so that this buyer also will have to look to American manufacturers for his supply.

The trade in the button line is well looked after. Only a few weeks ago a traveler representing a New York firm visited all the jobbers here and secured good-sized orders. The large agents in Montreal who represent American manufacturers also send their travelers to this city at regular periods.

The principal competition to be met by American manufacturers is that of Canadian manufacturers, and this is evidently being done successfully, since the majority of buttons purchased in Canada are of American make.

Concerns in the city were interviewed regarding any difficulty in procuring the buttons needed by them. They stated that they were able to get all they required for their trade, with the exception of the "agate" button previously mentioned. It would therefore seem that the principal extension in this trade would be in this particular line, which American manufacturers could supply in considerable quantities if able to make it.

The terms offered by American manufacturers to the local trade are very liberal. Purchases made for spring delivery are dated as of April 1 proximo with a discount of 2 to 5 per cent, 10 days, or net 60 days from April 10.

TORONTO.

Consul Julius D. Dreher.

In general, the button trade in Toronto corresponds in nearly all respects to the same trade in Buffalo and other cities of similar size in the United States. American fashions prevail and the same types of buttons are used. Cloth-covered buttons are practically the only kind manufactured in Toronto.

The principal competition to be met by American firms is from the Ontario manufacturers of vegetable ivory and fresh-water pearl buttons, situated chiefly in Berlin. New fashions in buttons in the United States are copied by these manufacturers, who are generally able to undersell the American product.

Firms using foreign buttons usually buy from importers or manufacturers' agents in Toronto. Some purchases are made by direct importation through purchases made from samples, some by direct importation through jobbers, and others from samples in the hands of local agents. Terms in England are 2½ per cent 30 days, net 2 to 4 months. Terms were practically the same for Germany and Austria-Hungary, from which supplies are now cut off.

VANCOUVER.

Consul General R. E. Mansfield.

Buttons are not manufactured in British Columbia, the local market depending entirely upon importation. Pearl buttons are imported chiefly from Japan. Imports from Europe include all classes; fancy dress and cloak buttons come chiefly from France and brass buttons mostly from England. All classes of buttons are imported from the United States also, and since the beginning of the war the button trade with the States has materially increased, notwithstanding the Canadian tariff.

Purchases are made from traveling representatives of manufacturers and jobbers, or from local agents of the wholesale firms, selections being made from samples shown by the salesmen.

Terms on American and eastern Canadian purchases are 2 per cent 10 days; Japan, sight draft attached to bill of lading; and on English and European bills, a credit of 60 to 120 days.

WINDSOR.

Consul Harry A. Conant.

The Windsor Pearl Button Co. (Ltd.) is located here, and a similar factory at Berlin, Ontario. They have a large sale of their products in Canada. In addition, large quantities of glass, metal, fancy fresh-water pearl, fabric-covered and vegetable ivory buttons are imported into this market. These goods come from the United States, Great Britain, Austria, Germany, France, Italy, and Japan.

There is no prejudice against American-made buttons, and a good market could be found for them here if the manufacturer can meet the prices offered by the home and foreign makers.

The purchases of buttons used and sold by the merchants in this vicinity are usually made through jobbers located in Toronto and other large Canadian cities.

WINNIPEG.

Consul General Frederick M. Ryder.

Aside from covering blanks, buttons are not manufactured in this district.

Just at the present time the "proper" button seems to be of military or patriotic design, in bright or lacquered metals, but this will probably not linger long after the close of the war.

There is a popular demand for the fresh-water pearl buttons (for skirts, waists, etc.), which come from France, but are made from shells shipped from Japan for this purpose. Since the beginning of the war, however, the Japanese have been more active in making buttons, instead of sending their shells to France. Local dealers have noted the improvement in the Japanese product, and predict that the French button makers will have difficulty in holding their trade when business returns again to normal.

Celluloid buttons for coats and skirts—in fact for most garments—are practically all of American manufacture; the fancy-colored buttons, which formerly came from Germany and Austria, are now imported from the United States; cut steel and glass buttons come principally from France.

The following statement, showing the value of buttons entered for local consumption at the ports of Calgary and Winnipeg for the fiscal years 1912–1915, indicates a considerable falling off, owing, doubtless, to the increased use of buttons made in Montreal (Quebec), Berlin, and Waterloo (Ontario).

Ports.	1912	1914	1915
Winnipeg	$35,812	$38,163	$31,891
Calgary	3,420	3,388	1,831

Canadian products have the advantage over foreign manufactures by the general tariff of 25 to 35 per cent plus 7½ per cent war tax and the British preferential, varying from 17½ to 22½ per cent, with a 5 per cent war tax added. Imports from Japan, France, and Belgium are favored with the intermediate tariff, which is 5 to 15 per cent less than the general tariff.

There has been a decrease of one-third in the button imports into Canada since 1913, Japan alone showing an increase.[1] The falling off does not necessarily, however, indicate that percentage of decrease in consumption, but rather that eastern Canadian manufacturers are making greater efforts to control the Canadian market and that button dealers are carrying as little foreign product in stock as possible.

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[1] See report for all Canada, p. 11.

For some reason vegetable ivory buttons are not entered prior to 1915.

Competition for this market is between the Canadian and American manufacturers. Most of the products of Canadian factories are the staple wooden buttons. Novelties and original designs come largely from the United States. It would be a simple matter for American manufacturers to replace German and Austrian buttons in this market, particularly at the present time. In fact, dealers and users generally for some time to come will look to the United States to furnish the buttons which have usually come from European manufacturers.

Firms using foreign-made buttons purchase from samples furnished by manufacturers direct or from local dealers. Representatives of foreign manufacturers or from large eastern wholesale houses make periodical business trips through these Provinces, selling by samples.

Department stores supply most of the buttons to the principal users and homes in the city. The wholesale dry goods houses in Winnipeg furnish the general stores through the west, their traveling salesmen carrying full lines of samples from all manufacturers; terms, 2 per cent 30 days and 5 per cent for cash.

There are four large companies located in Winnipeg which are extensive manufacturers of men's overalls, using large quantities of metal buttons for this purpose.

MEXICO.

AGUASCALIENTES.

Vice Consul H. G. Bretherton.

The consumption of buttons in the States of Aguascalientes and Zacatecas is about 2,200,000 gross per annum. Most of them are purchased in Mexico City, but some are imported direct, by wholesale. The usual types and materials are in vogue, practically all of them coming from Europe, because they are cheaper, especially the commoner grades. The terms in Mexico City are usually six months' time; for purchases in Europe, payment on receipt of goods; and on goods from the United States, 90 days' time. Purchases in Mexico City are usually made through agents; those made in Europe and the United States are for the most part made direct from samples sent.

The tailors in this district and practically all other users of buttons purchase from the wholesale and retail dealers in Aguascalientes and Zacatecas.

DURANGO.

Vice Consul Homer C. Coen.

Perhaps the largest immediate demand for buttons in this district is for plain polished brass or polished tinned buttons and the dark bronze buttons for military uniforms. Each officer of the army as soon as practicable secures at least one dress uniform, and, in accordance with the military custom of the country, the coat requires not only eight to a dozen bright buttons in front, but also two or three on each sleeve and from six to eight on the tail of the coat and two or more on the shoulder lapels, making in all from two to two and a half dozen buttons for the coat. These uniforms are manufactured by local tailors, materials of all kinds being imported. Any class of substantial bright-metal button, but preferably the ball or half-ball button about one-half or three-quarters of an inch in diameter, is suitable for this trade.

All the usual conch (pearl), metal, and composition buttons are used, as well as some cloth-covered buttons. However, one French house in this city has a small hand machine and sets of dies, and fills special orders for cloth-covered buttons for women's dresses.

There is no manufacture of buttons in this consular district, and under normal conditions all types of buttons are imported from France, Germany, and Italy. Some importations are made direct by the large French dry goods houses and German hardware houses and the rest are purchased in Mexico City from jobbers and wholesalers. No import statistics are available, there being no port of entry within the district.

The first difficulty the American manufacturer will have upon entering this market is that most of the large dry goods houses are French and the large hardware houses and ranch-supply houses (which also deal in buttons) are German. They are, therefore, acquainted with their home manufacturers, and nationality would induce them under ordinary circumstances to patronize home industry.

However, geographical position, cheaper transportation, and quicker communication, and therefore prompter service, are all in favor of the American manufacturer. The absolute necessity under present European conditions to buy at least some stock from America in order to fill up an almost depleted stock in Mexico therefore gives opportunity to the American manufacturers to see whether they can supply the type and class of goods used in this country, whether they can and will conform to the credit customs and habits of the importers, and finally whether they are willing to adapt their methods to the traditions and demands of the merchants of Mexico so as to please their customers and hold the trade for the future, when European conditions have changed.

At present business in Mexico should probably be done on a cash basis, for the reason that orders will be of small size and because there are little or no banking facilities in the Republic. Prices should be submitted accordingly, unless the importer has a banking connection in the United States so that customary terms could be allowed him. Customary terms under normal conditions of the past on this class of merchandise were six months at 6 per cent per annum against the date of shipping invoice. This gives the importer time to sell his goods, ordinarily, and so meet his creditor's bill. As stated above, under the prevailing abnormal conditions in this district I would recommend cash, or at least short time. Under normal conditions in this country the customary terms will have to be extended in order to hold the trade.

The large houses—dry goods and hardware—make the direct importations and generally resell at wholesale to most of the retail dealers, men's tailors, small street venders, ranch stores, and small town stores.

GUADALAJARA.

Vice Consul Will B. Davis.

Under normal conditions buttons are used quite extensively in this district, the materials most favored being porcelain, pearl shell, horn, and paste. All are imported, chiefly from Germany, France, England, and the United States, the total value of the imports in 1914 being $48,000. In 1915, however, the United States was the only source and the district imported only $600 worth in all.

American manufacturers should be able to secure all of the button trade of this district in future. The local firms either make direct purchases abroad or import from samples. Selling terms are usually from 60 days to 6 months after date of shipment.

MONTEREY.

Consul General Philip C. Hanna.

Buttons used in this consular district are almost exclusively American made. American manufacturers now encounter no competition, on account of the war in Europe, and even at the close of the war buttons of American manufacture will easily be the leading supply for this market.

The business houses here purchase from samples carried by traveling salesmen or by indirect importation through brokers or agents. The conditions of the transactions vary according to the circumstances of the importing firms; usually, however, they are on a cash basis.

The trade in buttons here is divided between the dry goods and the hardware houses.

SAN LUIS POTOSI.

Consul Wilbert L. Bonney.

Although buttons are handled in small lots in San Luis Potosi, the demand is steady and general. Metal buttons are used for overalls, working blouses, and for all denim and much of the khaki clothing. Pearl buttons are used for underwear and cotton dresses. For tailored clothing cloth-covered buttons are specially ordered to suit the customer. Buttons are not commonly used on silk dresses.

Nearly all buttons are imported. A native article of pearl buttons, cheap and of inferior quality, is made from Lower California shells. A poor grade of bone button also is manufactured in Mexico City.

American manufactures will have to meet the competition of cheap buttons from Germany, France, and Italy. The American buttons of all classes are of excellent quality, but prices are double those of foreign goods. American manufacturers may develop a market for fancy and high-class pearl buttons for vests and tailored suits, in which price of buttons is of secondary importance, but it is believed they can not compete in metal and bone buttons.

San Luis Potosi firms buy most of their buttons from Mexico City importers. A few small orders are annually placed direct with French exporters. There are no wholesalers of buttons in the San Luis Potosi district.

Chapter III.—WEST INDIES.

BAHAMA ISLANDS.

Consul W. F. Doty, Nassau, New Providence.

There are no statistics available, but in the opinion of the leading importer the value of buttons imported is about $4,000 annually. The local taste calls for the British article principally. Since the European war began imports have fallen off by about one-fourth, and the United States has been the only country of origin during that period. Mother-of-pearl and bone are the preferred materials. There are no local manufactures.

While the European war lasts no competition is to be feared, as the American button is procured at a lower transportation cost and less risk than the article of any European country. For example, it is no longer possible to import buttons from Austria through English jobbers. At present the American button has proved its worth and is likely to continue to be the vogue.

There is only one distributer of buttons in the Bahamas who purchases direct from American manufacturers or jobbers, having been encouraged by this consulate to exploit the American sources. Ordinarily importers purchase through commission merchants in New York City. Credit is extended by these commission houses for 60 days. Samples are forwarded by commission merchants. The dry goods houses, notably the one referred to as a distributer, do practically all the button business in the Bahamas. The few tailors for men's and women's suits do not import buttons direct.

It ought to be stated, however, that the Turks cap and many other shells gathered on the beaches of this section contain excellent varieties of mother-of-pearl suitable for buttons.

BARBADOS.

Vice Consul J. E. A. Ince, Bridgetown.

Buttons are used to a great extent in Barbados for both men's and women's garments and for general purposes. The most popular are those made of bone and pearl, with glass ones next, and all are imported from Great Britain. None are manufactured locally.

A demand for American-made buttons can be created, as both time and freight rates are in the American manufacturer's favor; but the manufacturer will have to cater to the local trade and supply what the various business houses require, as the English manufacturers do.

Since the outbreak of the European war Great Britain has supplied all the buttons required and would be the only competitor American manufacturers would have. No statistics are available, as the customs do not classify buttons separately.

All buttons are purchased from samples and are paid for when received, provided they are up to the samples shown.

BERMUDA.

Consul Carl R. Loop, Hamilton.

As the population of the islands is but 20,000, two-thirds of which are colored, the volume of the button trade in Bermuda is not large. Estimates on the basis of the imports by one of the leading department stores indicate that the total imports would be approximately 8,000 to 10,000 gross per annum.

In the tailoring trade the popular buttons are, in the order named, bone, horn, brass, and leather, nearly all of which are imported from England by way of New York. English buttons are not considered as good as the American product, but are much more generally used, because cheaper. For the best class of tailored garments the American-made button is more popular.

Retail, including department, stores carry lines principally of pearl, bone, glass, and linen buttons, which are for the most part imported through London from German, Austrian, and French sources, the pearl buttons coming chiefly from France. According to one firm, the same pearl button which comes from France and costs 5 cents per dozen would cost about 8 cents per dozen in the United States (Sept. 3, 1915). This estimate is regarded as typical of the divergence of prices between American buttons and those from Europe.

There is no prejudice whatever among the Bermuda dealers against the American product; in fact, there is a general disposition in favor of the latter, if they could only be produced at prices comparing more favorably with those at which other buttons are sold.

The tailors sometimes buy direct from manufacturers in the United States and sometimes from jobbers in London, but more often place their orders with English travelers who carry samples. In normal times from six to eight travelers representing general merchandise, who at the same time carry samples of buttons, visit Bermuda during the year. The terms are cash with discount of 7 per cent for American buttons, and 2½ per cent for English buttons, or 30 days net.

CUBA.

Consul Henry M. Walcott, Habana.

Prior to the war in Europe, most of the buttons used in Cuba came from France, Germany, and Austria, but since that source of supply has been cut off Cuban importers have been looking to the United States.

In general, there is very little difference in the styles of buttons in demand here and those used in the United States, though there is a much larger use of mother-of-pearl buttons. These must be genuine salt-water pearl, as the fresh-water pearl buttons are heavier and lack the luster of the former. Workmanship must be of the finest, as there is absolutely no sale for buttons of poor quality and finish, the taste of the people having been educated to accept only the best products of the European manufacturers. As the duty is specific, according to the weight of the buttons and cards upon which they are mounted, only light-weight cards should be used for mounting them. There is little demand for composition buttons, as even on the cheapest line of goods the defective pearl button is preferred to other varieties. Jeweled buttons are used to some extent on ladies' clothing, but have no extensive sale.

The duty upon entry into Cuba is according to the component material, usually falling under classification No. 298, manufactures of amber, jet, tortise shell, coral, ivory, mother-of-pearl, and meerschaum, dutiable from the world at large at $2.34 per kilo (2.2 pounds), with a 20 per cent reduction on the product of the United States, making the net duty on goods of this class from the United States $1.872 per kilo.

There is no local manufacture of buttons of any kind. Statistics of importation are not available, as buttons are not separately classified in the statistics.

If United States manufacturers and exporters are careful to supply the wants of the people exactly in accordance with instructions of importing firms, it would seem that with their advantage in freight rates and customs duties they should be able to hold the trade which is of necessity going to them now. It must be remembered that securing the order is only the first and least important step, if there is any desire on the part of the seller to hold the trade for the future. The really important feature is in filling and shipping the order exactly according to instructions to the last detail. Until our exporters develop this quality in the highest degree they can not hope to compete with foreign manufacturers under normal conditions.

Purchases of buttons are generally made direct by the importing firm, either from samples or by direct order to a well-known house which experience has shown will attend well to their wants. Nearly all the larger importing firms, however, do more or less wholesale and retail business in lines such as buttons, supplying the trade in the interior districts and the small stores and tailoring shops in Habana. The larger and well-established firms are accustomed to an extension of credit of at least 90 days, but they are usually willing to make prompt payments if inducements in the way of discounts are allowed.

It is very important that shippers use the utmost care in the preparation of invoices and shipping documents. Absolute accuracy in stating net and gross weights and values is particularly important, a slight error in these particulars often causing the goods to be delayed in the customhouse, frequently incurring fines and penalties, and sometimes causing the confiscation of the shipment.

There is a good opportunity for American manufacturers of buttons to extend their trade in this territory, but, as before stated, the trade will be secured largely, if not enirely, by those exporters who send well-qualified salesmen to solicit the business. It is almost useless to send salesmen who do not speak Spanish fluently, as nothing can be accomplished through the use of interpreters. Many of the buyers of the Spanish firms speak English, but generally speaking the salesman who speaks the language of the country fluently is the man who will capture the business, other things being equal.

DOMINICAN REPUBLIC.

Vice Consul E. L. Lowe, Puerto Plata.

At present there are great possibilities of developing the market for American buttons, as the European war has cut off the markets of Germany and France, and therefore little or no competition should be encountered. The development of trade in this article is also favored by the small stock actually on hand.

Firms wishing to sell their products generally send samples and prices direct to local merchants, who make their purchases through commission houses. Direct purchases of expensive buttons are sometimes made through parcels post, but only in very small quantities.

The firms selling buttons have wholesale and retail establishments with merchant tailor departments, and they import approximately 200 great gross each annually. No button manufacturer is represented locally, as all purchases are made from samples sent direct by the manufacturer.

Ordinary bone buttons have been imported entirely from Germany. They cost (Sept. 14, 1915) from 6 to 7 marks ($1.43 to $1.67) per great gross and are sold locally at from $3 to $4 per great gross. The higher grade, such as pearl buttons, are obtained from France, at a cost of 2 to 8 francs ($0.39 to $1.54) per gross, and are sold locally at from $1 to $3 per gross.

According to paragraphs 1096, 1097, 1098 of the Dominican customs tariff, buttons pay import duties as follows:

1096. Amber, jet, coral, ivory, meerschaum, tortoise, mother-of-pearl, and other shells:	
(*b*) Buttons of any kind, including cuff, collar, and stud buttons, net weight per kilo	$0.50
1097. Horn, bone, hoof, whalebone, vegetable ivory, paste, and celluloid; also compositions imitating these, or materials described in paragraph 1096:	
(*b*) Buttons of any kind, including cuff, collar, and stud buttons, net weight per kilo	1.00
1098. Buttons of any kind, including cuff, collar, stud buttons, picture and insignia buttons not specified, except those of gold or silver and gold or silver plated buttons, net weight per kilo	1.00

NOTE.—None of the articles classified under pargaraph 1098 shall pay a less rate of duty than 50 per cent ad valorem.

HAITI.

Consul John B. Ferris, Port au Prince.

Previous to the European war France and Germany held the largest portion of the trade in buttons in Haiti; but now that the facilities for obtaining supplies from these two countries is difficult, the trade with the United States has had a considerable increase, and it is highly probable that it will continue.

Buttons of all the different types are used extensively, the ordinary bone buttons, mother-of-pearl, metal, etc., being most in demand. None are manufactured in Haiti, and American manufacturers will meet with but little competition from other countries, for the reasons cited above.

The merchants here order principally through commission houses. The principal importing houses have many branches or retail stores in this city as well as in the coast towns.

JAMAICA.

Consul James C. Monaghan, Kingston.

From the information available it appears that about £20,000 ($100,000) worth of buttons come to the island in the course of a year. The Jamaica Hand Book does not give the value of buttons separately, as they come under the heading " General haberdashery."

The materials most favored are bone, fancy pearl, and fresh-water pearl. The styles most in use are tailors' buttons made of bone, ivory, horn, and composition; women's dress buttons of fancy pearl, fresh-water pearl, agate, glass, bone, ivory, composition, metal, etc. In fact, almost every kind of button that is used in the United States is sold in Jamaica. No buttons whatever are manufactured in this country, with the exception of hand-covered crochet buttons, and these to a very small extent.

At the present time there is a good field for American buttons on account of the European war. Previous to the war the imports were principally from England, Germany, Austria, and France, and some pearl buttons came from Italy. It is almost impossible, however, to get buttons from England now, and importers are looking to America for them.

Purchases are made principally direct, from travelers' samples and from samples shown by local agents. The terms usually asked for by importers are either 2 per cent discount for remittance on receipt of goods or 60 to 90 days net. Purchases are made also through commission merchants, who pay for the goods in the country where they are shipped, and they make their own terms with their customers. It is not customary for agents to assume the responsibility of the accounts.

MARTINIQUE.

Consul Thomas R. Wallace, Fort de France.

The material for men's and women's clothing in Martinique is principally cotton and linen goods, light woolens, and silk, and the common types of buttons used are mother-of-pearl, mussel shell, bone, horn, wood, jet, glass, metal, celluloid, porcelain, and covered buttons.

Practically all the buttons consumed in Martinque are imported from France. Two years ago a small quantity was imported from the United States, but the amount did not exceed $10 in value. The total invoiced value of buttons imported annually for the past three years was as follows: Seven hundred and twenty dollars for 1912, $940 for 1913, $1,010 for 1914. No buttons are manufactured in Martinique for sale. Tailors make cloth-covered buttons for their own use, employing a French machine for the purpose; they import the metal or wood base for the button from France. They will, upon request, supply a tailor friend who will furnish the cloth for the covers.

The principal obstacle to be met by American manufacturers in competing for the button trade of Martinique is the high tariff assessed against foreign imports of this class of goods. French products are admitted free of duty. Another obstacle is the disadvantage arising from the difference in language employed by the buyer and seller; the Martinique colony is French and its merchants prefer to send orders to the concerns speaking the language of the place, and unless a decided advantage is offered they would naturally favor their own countrymen.

The practice of the larger and more responsible business concerns is to pay cash to secure the benefit of lowest prices and largest discounts. The main consideration of first-class houses is the price and quality, and longer terms of credit would not overbalance such considerations in deciding between competing lines.

The firms dealing in dry goods and notions are the chief importers of buttons in Martinique. The local trade is largely supplied from their stocks. Tailors and dressmakers purchase their supplies from local merchants except small orders for exceptional goods, which they import direct. The principal mercantile establishments in the dry goods and notion trade are branch houses of French firms with headquarters in Paris. The goods for their stocks are all supplied from headquarters upon orders from the managers of the local concerns. It is estimated that three-fourths of the trade of the island, in their lines, is transacted through these branches; subbranches are established in all of the chief cities of the colony. Other firms supply their stock by direct purchases made in France, or by importation through purchases made from samples. Smaller concerns purchase from the larger, although they sometimes import direct. There are no jobbing nor wholesale houses in Martinique.

The commission merchants or agents sell goods from sample when opportunity offers for the sale of the same, but they do not handle dry goods and notions, because of the fact that such goods are purchased in France by the large concerns through their own buyers, and they have practically a monopoly of the business.

The button trade is just beginning to be affected by the war. The old stocks are depleted and a shortage is becoming apparent in the market. The principal users are complaining of the scarcity of the common types at the stores and it is possible that a trade may be established by American houses who can meet the demand.

TRINIDAD.

Vice Consul John V. Swearingen, Port of Spain.

The principal types of buttons imported into this colony are pearl, bone, shell, vegetable ivory, and horn, which are used on men's and women's light clothing, particularly linen, duck, silk, and other light washable goods such as are worn in the Tropics.

There are no buttons manufactured locally, and formerly they were imported from Germany, Austria, France, the United Kingdom, and the United States. At present there are no imports from Germany and Austria, and the greater part of the buttons imported come from France, the United Kingdom, and the United States, France supplying most of the pearl buttons.

Purchases of buttons are generally made by direct importation through purchases made from samples shown by a foreign agent, and any agent has a fair chance in this market, provided he can compete in price and quality. Prospective purchasers here seldom ask for long terms of credit, the general terms of sale being cash or sight drafts accompanied by bills of lading.

No statistical information can be had as to the value of the buttons imported into the colony, for all such imports are classified in the collector of customs' report under the head of haberdashery. Three managers of leading department stores of this city have estimated the annual imports of buttons at $20,000.

There are no firms of this colony importing and selling buttons on the wholesale plan; all importations are made by the department stores and retailed to the local tailors and to the general public for use in the homes.

Chapter IV.—CENTRAL AMERICA.

BRITISH HONDURAS.

Consul William L. Avery, Belize.

The demand for buttons in British Honduras is moderate but steady, and chiefly for the staples for men's wearing apparel—vegetable ivory for coats and vests, in colors to match the cloth, and a cheaper button for the trousers. A small quantity of brass buttons is used, but buttons that will rust, immediately or eventually, find no market here, where so much white washable material is worn.

The most common other standard buttons are mother-of-pearl, known to the trade as "pearls" and used by women for dresses, underwear, and children's apparel. Linen buttons are sold in very small lots.

Buttons are rarely imported from the United States, except to fill a special order, and those few are marked "Made in Japan" or "Made in Austria." I have never seen any bearing the legend "Made in the U. S. A." At present all the trade in buttons is with England, the German, Austrian, and French supply being suspended, but I have been informed that orders placed in England over six months ago are yet unfilled.

No buttons are made in the colony, unless the covering of wooden "shapes" with material to match goods can be classed as manufacturing.

No statistics are available as to the amount or value of imports of buttons, but six of the principal mercantile houses in Belize carry regularly a stock of $600 to $800 worth of buttons, the smaller dealers being supplied by these houses.

There has been little competition in this line by the American manufacturers; but one British manufacturer has an agency in Belize, with samples, prices, etc., all ready to capture and hold the trade.

The usual credit is 90 days, or a cash discount of 3 to 4 per cent upon delivery of goods at dock in Liverpool. Correspondence to secure a local agent in Belize could be directed to any of the commission agents whose names are on file with the Department; or the many American commercial travelers visiting the colony could pay more attention to the introduction and sale of American-made buttons.

The local tailors do not carry any stock of tailoring material, making all purchases from the local general merchants.

COSTA RICA.

SAN JOSE.

Consul Samuel T. Lee.

In Costa Rica the greatest demand for buttons is found in the ready-made clothing trade, which is a household industry, and also for women's and children's clothing mostly made at home. There is, in addition, a smaller demand for high-grade buttons imported by the merchant tailors established in the larger cities. Nearly all men's high-grade clothing worn in Cost Rica is custom-made.

No buttons are manufactured in Costa Rica. Official statistics do not give amounts or values of buttons imported, but the volume must be sufficient to meet the needs of a population of 400,000. Much washable clothing is worn and this increases the demand.

Germany, Austria, France, Italy, and England have supplied the button trade of Costa Rica, the market requiring principally pearl, bone, vegetable ivory, metal, and cloth-covered buttons. The terms are six months, with discount at varying rates, as high as 15 per cent on some German products. The duties are 85 cents per pound gross weight on pearl buttons, 42 cents on the other varieties.

This merchandise is shipped almost entirely by parcel post, and in this particular the American manufacturer is at a decided disadvantage for the reason that the existing United States parcel-post convention with Costa Rica is inadequate and not favorable to American trade, while European countries have practical treaties covering parcel-post shipments.

The local firms buy directly by parcel post from exporting firms in the various countries of origin, and generally after selection from sample cards, which give exact data at once regarding prices, terms, etc.

PORT LIMON.

Consul C. Donaldson.

The average annual imports of buttons into this district for the last five years have been less than $1,000. The sources have been England, Germany, Italy, France, and the United States, but from private conversation with the principal firms in this city it is very evident that they intend to get most of their buttons from the United States in the future if favorable terms can be made with American manufacturers.

Purchases are now made through direct importation from samples. There are no local agents. Credits of 90 days to 6 months are generally given to the large importers.

GUATEMALA.

Consul William Owen, Guatemala City.

Data covering the value and quantity of buttons imported are not given by customs statistics except for buttons made of crystal, glass, clay, and porcelain, of which the imports amounted to $1,089 in 1914. It is impossible to estimate the other kinds, but there is a steady demand for staple lines. Tailors, both men's and women's, use cloth-covered and bone buttons of the best make, and also rivet buttons. Cheap bone, china, porcelain, and metal find their way among the poorer classes of people. Metal rivet buttons are found on overalls, which are used by laborers and artisans to very great extent. Brass buttons, bearing proper insignia, are imported for army uniforms and uniforms of employees of postal and telegraph services. Women are using cloth-covered buttons to match dress. For clothing, French styles, rather than American, are worn by better-class Guatemaltecos, and buttons, of course, accordingly. Americans and foreigners generally adopt American dress with corresponding buttons. Sleeve, cuff, and collar buttons are imported liberally.

A few small establishments have hand machines for covering buttons with cloth, importing wooden and metal molds for the purpose. This work is done to order, customers furnishing the cloth. No buttons are otherwise manufactured.

Italy manufactures the great bulk of buttons used here, which find their way to Guatemala through Germany, Austria, and England, the latter countries receiving credit for their productions.

The principal competition for American manufacturers to meet is that offered by German merchants. German capital is invested in Guatemala, and the German thorough methods of business prevail, with the German willingness to study local conditions. This is true also of English furnishers, although to less extent.

A leading dry-goods importer stated: "If I send a sample button to Europe they will make it, even though the order be for 10 gross only, while in the United States a 100-gross order would probably not be filled." A further great factor in competition is prices, which are lower in Europe.

Most of the buttons purchased here are sold by German traveling men, who on arrival rent a suite of rooms having good light and display their samples. Many of them devote a month to preliminary work before they attempt to sell; then, to those who are worthy of it, they extend credits of 6, 8, and 10 months. Sixty days' time is too short. Although transportation facilities are much improved, still it is frequently 60 days, or very nearly so, from date of shipment before the goods are in store. Moreover, with the constantly fluctuating rate of exchange to which this country has been subject for the past 15 years a merchant who is held down to prompt payments is at a great disadvantage as compared with one who has time to purchase exchange when it may be done to best advantage.

Tailor shops generally purchase from importing firms, who in turn, for the greater part, buy from samples exhibited by traveling salesmen as described above. Firms here that are branches of permanently established Hamburg or London houses always buy through their principal firms abroad.

All importers sell by retail direct to the trade. There are no jobbers.

HONDURAS.

TEGUCIGALPA.

Consul E. M. Lawton.

The total annual imports of buttons for Honduras probably do not exceed $20,000. Europe has heretofore supplied the greater part. For this consular district France, Germany, and England have contributed about equally.

Pearl buttons for dresses or those with metal eyes and rings or hooks for detaching, white china buttons from 14 to 24 lines diameter, and pants buttons in bone, vegetable ivory, and some nonrust metals form the greater part of the imports. Owing to the humid climate buttons of horn, papier-mâché, and metal are not very satisfactory. Horn deteriorates, composition splits, and metal buttons rust out.

The general merchandise houses, which are the principal importers, usually buy for cash or its equivalent. Local commission firms also finance purchases. When credit is extended four months is the usual time, with interest on deferred payments. The larger houses either buy on direct importation, made and consummated by their European branches or correspondents, or from samples brought or sent here. Smaller firms either buy from them or through local commission firms, which now maintain sample rooms of American goods.

Japanese buttons are beginning to take the place of European supplies, especially in pearl buttons. American products are at a disadvantage, because the pearl and porcelain buttons are too high in price in comparison with other makes, and in cheaper articles the American manufacturers specialize in composition of metal goods not suitable for this climate.

The limited purchasing power of Honduras may be taken as an index of the extent to which buttons are used. The really wealthy class are extremely few in numbers, and but little ostentatious display of dress is seen, so that extreme styles are neither possible nor popular. In the more thickly populated western half of Honduras European dress prevails, but costumes are on a modest scale, so that buttons are for use and not ornamentation. For this reason fancy buttons are not in great demand.

No buttons are manufactured in Honduras, except those of the cloth-covered type; some few tailors have small hand machines which turn out a wooden mold and a circle of cloth, and the button is finished by hand. All other buttons are imported, but as the Government statistics do not segregate such items no figures are available as to the source or value.

Nearly all dealers are general merchants; no firms handle exclusive lines. Very little ready-made clothing is sold in the Tegucigalpa consular district; only a few Palm Beach suits, some khaki, overalls, etc. Of women's clothing only a negligible amount of cheaper lines is imported, the greater bulk being turned out by local seamstresses and housewives. There are no women's tailors, no exclusive dry-goods stores, no department stores. Men's tailoring is also very primitive. As an illustration, a recently opened tailor shop in this city, owned by a tailor who had learned his trade abroad at Government expense and enjoyed a Government concession for free importation of findings, was obliged to bring four operators from Guatemala in order to have assistants who could do the work.

Most of the buttons are used by the small tailors and by the general public in the homes. A large amount of cotton drill is annually manufactured into men's clothing by sewing women in their homes, and a similar class make the major part of women's and children's clothing. In any case, the buttons are purchased more or less directly from the larger general merchandise houses, which do both a wholesale and retail business and supply the smaller dealers as well as the actual consumers.

PUERTO CORTES.

Consul John A. Gamon

The more common lines of button requirements of this district are as follows: (1) Pants buttons (sizes 22 to 30 lines); (*a*) bone, black and white, (*b*) composition, black and white, (*c*) metal, black gun metal and brass. (2) White china (sizes 14 to 22 lines). (3) Pearl, for dresses in natural colors (14 to 32 lines). (4) Pearl (good quality) with hooks for detaching, for pants and suits. (5) Composition, for suits, black, tans, and drabs. (6) Fancy buttons, various, according to styles.

There is likewise a fair demand for clasps of good quality, sizes 0 and 1, in black and white. This product has been imported almost exclusively from Germany.

Local importers state that probably $8,000 worth of buttons are imported here annually. Probably 70 per cent of this amount comes from Europe.

With equal price the American manufacturer should be well equipped to compete with the European product. In fact, some of the local merchants claim that in some types, especially pearl buttons, the American product is superior in quality to the European.

While the importer of this district has been accustomed to the long-term account, it is believed that with a good discount for cash this factor might be fairly well eliminated and should not cause the American exporter a great deal of concern.

The exporter to this district is compelled to make shipments in a compact form with a minimum tare weight, both on account of a cubic freight rate prevailing with the steamship lines and on account of the Honduras import tariff, in which the duties are levied on the gross weight of the shipment.

The present should be a very opportune time to advance the American button trade in Central America, but complaints have recently come to this consulate from local importers to the effect that the American representatives traveling in these countries have been unable to meet their requirements in this line. If the American manufacturer can furnish the product it would be advisable to submit samples and prices f. o. b. New York or New Orleans, unless the manufacturer is able to work in conjunction with other noncompeting lines in the matter of personal representation.

Importers in this district make their purchases almost exclusively from sales agents and selections are made from samples carried by the agents.

The European accounts are generally offered on a 6 months' basis, with the customary 6 per cent interest charge.

NICARAGUA.

CORINTO.

Consul Harold D. Clum.

Buttons are used much less extensively in this country in proportion to the population than they are in a country like the United States. The clothing of the poorer classes, who constitute the bulk of the population, is so made as to require a minimum number of buttons. Moreover, patent metal fasteners or snaps have superseded buttons to a great extent on the clothing of women of all classes, except where buttons are required for purposes of decoration as well as of utility.

The types of buttons imported and the materials of those most extensively used are as follows:

For men's clothing: Bone, horn, and composition buttons, of cheap and medium grades and varying in color from white and cream color to dark and black, for coats and vests; cheap bone buttons for trousers; cheap bone and china buttons for shirts for men of the laboring class. (Shirts and underclothing of better quality are imported ready-made.)

For women's clothing: Fancy, and especially colored, buttons of composition and vegetable ivory, celluloid, and glass, pearl and imitation pearl for dresses; cheap china and bone buttons for underclothing.

There are no local manufactures of buttons, and 10,069 pounds, worth $8,851, were imported in 1914. These figures are the total for the Republic. Probably 80 per cent of the total came to this consular district—the western half of the country. Germany, France, and Italy were the chief sources of supply, the United States furnishing 1,017 pounds, valued at $1,023.

The principal competition to be met by American manufacturers of buttons under normal conditions will be, of course, that of Germany (especially in cheap bone, glass, and china buttons), of France (in various kinds, especially bone, crystal, glass, and china), and of Italy (in vegetable ivory and composition buttons). While it should now be possible to secure a considerable part of the trade, it will not be possible to develop any considerable demand for American buttons owing to the limited needs of the district and country.

Buttons are imported into this country only by general merchants, who purchase them through exporting commission houses, with whom some of them have open accounts. The terms to others vary. Before the war some European houses granted six months' credit, and 60 and 90 days were common terms from American as well as European commission houses to importers of approved standing. Credits are now much restricted, and houses which do not have open accounts with the exporters are usually required to pay cash with order or against shipping documents.

There are no ladies' tailors, agents for tailors, ready-made garment stores, or department stores with ladies' tailoring departments or ready-made garment departments in this district, women's garments being made either by the wearers themselves in their homes or by dressmakers. The buttons, as well as all other materials, are purchased from the general merchandise stores.

BLUEFIELDS.

Consul Cornelius Ferris, jr.

On the eastern coast of Nicaragua the button trade is limited to an insignificant sale by retail dealers to the general public for use in the home. A general-merchandise dealer, who probably sells the largest amount, estimates that prior to 1911 he imported $500 worth of buttons a year. Since that time he has imported from $90 to $125 worth annually. There are not more than a dozen other importers on the entire eastern coast of Nicaragua. Another dealer, who is in a position to know, estimates that at present $250 or $300 would buy up the entire stock of buttons in Bluefields.

Until the beginning of the war buttons imported into eastern Nicaragua came principally from England, Germany, and France. Since the war they have come from the United States. Buttons from Europe are ordered from samples, direct from foreign commission merchants.

Importers on the eastern coast of Nicaragua order American goods through their regular agents in New Orleans. As a rule such orders are filled by New Orleans jobbers, there not being enough trade to deal direct with manufacturers.

PANAMA.

Consul General Alban G. Snyder, Panama.

No buttons are manufactured in Panama, and though most of the ordinary varieties appear on the market, the volume of imports is not large. The last available statistics, which may be taken as indicating the annual average, show imports to the value of $9,650 in 1912. Of these the United States supplied $1,550 worth. White and the lighter colors of buttons are chiefly used, to match the light-colored clothing worn in the Tropics. The materials for the most part are mother-of-pearl, bone and corozo, metal, glass, and cloth covered.

The factors that American manufacturers of buttons must meet are the lower cost of manufacture in Europe and the style of putting up of the inexpensive article. I would specially emphasize the put-up feature. With the exception of the bone and corozo buttons, which are put up loose in small boxes of 1 gross, all other classes are put up on cards of 6 to 24 buttons, according to size.

Purchasers of buttons usually buy from German travelers, who bring samples of every conceivable kind of Austrian and German manufactures to minimize their traveling expenses.

Terms are credit from 30 days up, and a buying commission to the agents of 4 to 5 per cent. The customs duty on buttons is 15 per cent ad valorem.

Local dealers inform me that up to within the last two or three months no difficulty was experienced in securing what they needed in the way of buttons, doubtless because of the large supply on hand at the time of the outbreak of the European war, but present indications are that they will have to look to the United States to supply future requirements.

COLON.

Consul William H. Gale.

The local importers state that the reason the trade has been held by European countries is the lower prices. There seems to be no reason why American button manufacturers should not win and retain the greater part of this trade if at the close of the war they can meet the prices of European manufacturers.

The local firms that use buttons make their purchases by direct importation through samples furnished them by the foreign manufacturers.

SALVADOR.

Vice Consul Lynn W. Franklin, Salvador.

The following statistics show the imports of buttons into Salvador in 1913:

Country.	Quantity.	Value.	Country.	Quantity.	Value.
	Kilos.			*Kilos.*	
Germany	3,115	$2,380	Great Britain	706	$432
Austria	318	336	Italy	1,573	2,681
Belgium	195	180	Japan	69	102
United States	1	2			
Spain	484	655	Total	10,470	11,403
France	4,009	4,635			

As will be noted, France, Italy, and Germany furnished approximately three-fourths of the buttons used here in 1913.

The materials most favored for the well-known types of buttons are corozo or ivory nut, bone, wood, mother-of-pearl, metal (the tin button covered with copper formerly imported from Germany), and porcelain. The fancy buttons are made of glass, metal, and corozo. No buttons are manufactured locally.

There is a market at the present time for American buttons in Salvador, but to secure this permanently it would of course be necessary to manufacture buttons similar to those already in use and at competitive prices. By becoming acquainted with the responsible houses here and extending to them the assistance they require at this time, much would be accomplished for the stability of trade in this country in favor of the United States and to the advantage of the people in Salvador.

In general, the firms that import foreign buttons make their purchases direct from the manufacturer as well as through purchases from samples shown by traveling agents. The terms are usually four to five months with 6 per cent interest. In some cases where buttons are bought through a manufacturer's agent the latter makes himself responsible for the account of his client. Some houses pay cash upon receipt of invoice of shipment (shipping documents).

Chapter V.—SOUTH AMERICA.

ARGENTINA.

Vice Consul John S. Calvert, Buenos Aires.

There is practically no button-manufacturing industry in Argentina. Almost the entire demand, therefore, is supplied by foreign manufacturers, and, as will be seen from the appended statistics of imports for the years 1912, 1913, 1914, and 1915, Germany has furnished the greater portion. France also has an important trade in this line, and Japanese mother-of-pearl buttons, on account of their transparency, find a ready sale.

All the buttons imported into Argentina are grouped under the general heading of "Buttons." The total imports, together with the countries of origin, for the years 1912 to 1915, inclusive, were as follows:

Countries.	1912		1913		1914	1915
	Quantity.	Value.	Quantity.	Value.		
	Pounds.		*Pounds.*		*Pounds.*	*Pounds.*
Austria-Hungary	15,463	$9,563	18,565	$13,333	8,397	2,926
Belgium	5,090	2,662	6,047	2,909	11,221	97
France	204,324	158,853	195,292	137,663	113,179	59,915
Germany	454,163	239,767	565,563	320,154	289,911	25,261
Italy	121,904	74,572	118,035	69,030	73,132	39,868
Japan	44,779	36,144	39,936	25,056	22,496	19,281
Netherlands	....	....	84	51	....	470
Spain	7,125	2,336	64,050	37,749	35,147	14,859
Sweden	....	....	....	....	....	626
Switzerland	1,034	975	610	160	2,918	1,872
United Kingdom	59,553	31,773	79,560	43,481	41,515	30,971
United States	14,289	7,230	4,082	2,326	10,625	22,879
Uruguay	....	....	249	88	29	....
Total	927,724	563,875	1,092,073	652,000	608,570	219,025

For the years 1914 and 1915 figures showing the total value of the imports are not available.

From the statistics it will be seen that an overwhelming amount of buttons were imported during the years 1912 and 1913 as compared with 1914 and 1915. This decrease is not entirely due to the abnormal conditions existing in the countries which formerly supplied the greater portion of this country's demand. The cause lies in the fact that the years 1912 and 1913 were especially boom years, purchases being made on a large scale. With the beginning of 1914, when a rather serious financial depression took place in this country affecting all classes of trade, local dealers found themselves with large stocks on hand. The result was that during 1914 and 1915 there was a gradual liquidation of existing stocks, with imports limited to such classes of goods as were especially needed. The clothing trade was severely affected by this depression, and in some instances dealers here still have large stocks of buttons on hand; hence the cutting off of their former sources of supply has not seriously interfered with their business.

A large variety of buttons are used, and it is difficult to say just what type predominates. Mother-of-pearl, ivory nut, horn, papier-mâché, metal, bone, etc., are among the best known materials. The cheaper grades of buttons find readiest sale in Argentina. Local firms which have purchased goods in the United States admit that the American-made button is of a very good quality, but it is too expensive to find any great market here. Less attention often is given to the quality of the article than to the price.

Purchases of buttons in this market are made in a number of different ways, according to the circumstances and the conditions in which the importer or wholesaler finds himself. Two large wholesale importers of buttons here maintain a purchasing agent in Paris, to whom samples of the desired types are sent, together with orders, etc. He visits the manufacturers in the different European centers, submits the samples, obtains quotations, terms, etc. In Europe he has always been able to induce the manufacturer to make the buttons according to the specifications submitted. This agent also looks after the credits and other details which may facilitate the shipment of the goods, submitting to the manufacturer information regarding the proper packing.

Other firms buy from the manufacturer's agent who comes to this country with samples, and who states always, of course, that his firm is ready to make the buttons according to the local demand. The wholesale importer here carries large stocks, and in turn supplies the various retailers and the smaller users, such as tailoring establishments, etc., in this country. There are very few retailers or small users who buy direct from foreign manufacturers. One concern purchases buttons in the United States through a commission house which maintains an office here and in New York. Another firm has obtained the services of a purchasing agent in New York, to whom samples and specifications are sent, and the agent then finds the manufacturer who is likely to be able to fill his order.

Probably the best way for American manufacturers to secure this trade, however, it to send an expert button man to this country to make a minute study of the market and arrange with one of the large wholesale importing houses to handle the American goods. The manufacturer, rather than the commission merchant, must interest himself in this market, and he must be willing to manufacture such styles of buttons as are in demand, according to the season and according to the changing fashions.

Credits of 120 to 150 days have been the rule in the button trade here in normal times, the consignee demanding the privilege of inspecting the merchandise before he accepts the bill. Although lesser credits are often accepted, facilities of less than 90 days are very much deprecated.

As the customhouse duty in Argentina is paid on the weight of the buttons, it is absolutely essential that shippers take this fact into account, and put up the buttons on cardboard as thin and light as possible. The thread with which they are attached should be very fine, though at the same time durable. Wire or heavy cord should not be used. If the merchant here is required to pay a considerable amount of duty on cardboard and material other than the buttons themselves, he naturally becomes prejudiced against the exporter who causes him this expense.

ROSARIO.

Consul William Dawson, jr.

So far as ascertained, Argentina has no button manufactures, and imports chiefly from Germany, France, and Italy. From 1908 to 1912 the annual imports averaged $496,849 in value. In 1913 they reached $651,994, but fell to $352,457 in 1914. (The value given in these figures is that officially fixed for customs purposes, and does not represent the invoice or commercial value. It does not include buttons made of precious metals.)

About 99 per cent of all buttons imported into Argentina are entered at Buenos Aires. While in some instances buttons imported by Rosario firms may be entered through the Buenos Aires customhouse, my information would indicate that the quantities of buttons ordered by Rosario merchants direct from exporters are not large. This is explained by the considerable advantage in price obtained on large orders which enables the Buenos Aires distributer to sell at a price which often does not exceed the cost of a small lot imported directly. Furthermore, Buenos Aires is the principal distributing center for dry goods as respects not only southern Argentina but also this consular district and Rosario.

A manufacturer who intends to conduct an active campaign and go to considerable expense to extend his foreign trade would be wise to send out a representative to study the peculiar demands of the market and get into personal touch with importers. This is the most satisfactory way to introduce a new line, and is the method which has been successfully followed by German, French, and English manufacturers.

For detailed information with respect to credits, the manufacturer is referred to a report entitled "Foreign Credits" (Special Agents' Series No. 62), published in 1913 by the Bureau of Foreign and Domestic Commerce.[1] The usual terms are there stated to be 90 days after receipt of goods, with interest at 6 per cent. It should be noted, however, that since the publication of this report banking facilities for American exporters have been materially increased by the opening of a branch of the National City Bank of New York at Buenos Aires.

All kinds of buttons are used. Styles follow those of France for women's and England for men's clothing.

BRAZIL.

RIO DE JANEIRO.

Consul General Alfred L. Moreau Gottschalk.

In the trade in buttons, Brazil figures both as importer and manufacturer. The domestic industry, although promising, has not by any means reached such proportions as entirely to supply the local demand, still less to warrant the exportation of these products.

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[1] A copy can be obtained for 30 cents from the Superintendent of Documents, Government Printing Office, Washington, D. C.

The following statistics show the import trade in buttons in Brazil during the last five years, classified by the principal countries of origin:

Countries.	1910	1911	1912	1913	1914
Belgium	$2,378	$1,651	$2,588	$707	$1,574
Germany	114,060	145,462	131,626	172,411	64,945
Austria-Hungary	73,456	83,757	64,681	90,460	24,555
United States	16,219	10,165	9,424	5,879	2,821
France	194,675	199,222	183,780	162,608	16,051
Great Britain	10,208	15,733	12,276	12,955	4,457
Italy	79,045	149,497	207,665	167,204	68,905
Japan	2,075	2,810	3,957	12,680	2,677
Other countries	544	494	6,963	11,113	5,750
Total	492,650	608,791	622,960	636,017	221,735

Brazil imports practically all the types of buttons used in Europe. The number of varieties runs into the thousands, apparently. The great range of quality may be gauged by the fact that buttons are sold in this market (Sept. 16, 1915) for from 800 reis (20 cents in United States currency) per gross to 3 milreis (75 cents) apiece.

It should not be deduced from the above statements that any and all types of buttons manufactured in the United States will find a ready market here. The various special types of buttons for women's wear are continually changing with the European styles and it requires the utmost attention and care on the part of importers that large stocks of out-of-date buttons shall not remain unsold. I am told that some of the larger houses in Rio de Janeiro sell as much as $5,000 worth of buttons monthly.

Buttons of the following types are principally in demand: Wood, glass, bone, horn (very cheap), composition, mother-of-pearl, ivory, and celluloid (with springs for collar and cuff buttons). The cheapest types are sold in very large quantities in the interior of the country.

Although vegetable ivory is found in considerable quantities in the Amazon district of Brazil, the freight rates from this source to Rio de Janeiro are so high, and the import duties comparatively so reasonable that local dealers and importers have found it more advantageous to import this type of button than to manufacture them locally from the native product. All colors are in demand, but gray, brown, and black predominate.

Buttons manufactured from vegetable ivory are imported chiefly from France and Italy, and before the European war Germany also furnished a considerable quantity.

In the mother-of-pearl button manufactured locally, the raw material is imported from Japan, a certain quality known in Japan as "takase" being most widely used. The finished mother-of-pearl buttons are imported principally from France.

A large local importer of buttons in this city furnishes the following list of dimensions of pearl buttons sold here, and an estimate of the percentage of trade done locally in each of the sizes listed:

	Per cent.		Per cent.
12 lines	10	28 lines	3
14 lines	6	30 lines	3
16 lines	15	32 lines	5
18 lines	3	34 lines	5
20 lines	5	36 lines	2
22 lines	25	40 lines	2
24 lines	5	50 lines	1
26 lines	10		

The trade in metal buttons is almost all in the hands of a native factory, this class of buttons being limited to military, naval, and official types and patterns. The army, the navy, the police and fire departments, and similar Government establishments all use buttons of local make. Uniform buttons of the highest grade and more intricate design are occasionally imported in limited quantities for officers' uniforms.

Copper is most used in the manufacture of metal buttons. It is imported in sheets from France in various sizes, the commonest being 134 by 67 centimeters and weighing 1½ kilos per sheet. Thicknesses vary considerably, but 0.3 millimeter is the most in demand. The European war and the listing of copper as contraband has made difficult the importation of these copper plates from Europe. The demand is now being supplied by local foundries, which utilize scrap copper for this purpose. Formerly there was a demand for iron buttons used on men's trousers, but these have in recent years almost entirely disappeared from the market.

Bone buttons, used principally for underwear, are both made in this country and imported from France. Bone and celluloid buttons with springs are rarely sold in any size other than 22 English lines.

The following are the most popular sizes of these types of buttons and the approximate amount of sale enjoyed by each:

	Per cent.
20 lines	5
22 lines	5
24 lines	10
32 lines	30
34 lines	10
36 lines	5

Glass buttons are very cheap in quality, white and light colors prevailing, and vary in size from 12 to 26 English lines. Gold, rolled gold, and plated collar buttons are all imported, the United States enjoying the greater share of this trade, Germany and England following.

There is only one firm in this city manufacturing buttons, the Companhia Industrial e Mercantil, Rua S. Pedro 36, Rio de Janeiro, with its factory at Rua Mello e Souza 101, Rio de Janeiro. This firm appears at present to limit its operations to the production of mother-of-pearl and metal buttons. Several smaller establishments cover certain types of buttons with cloth for ladies' garments.

The chief obstacle for our manufacturers in competition is in price. From interviews with local firms it would appear that American prices average about 100 per cent more than those of Europe, which fact has practically precluded any appreciable increase of American trade in this line.

Buttons for sale in Brazil are mounted on cards, the size and number of buttons per card varying considerably. Eighteen large buttons are usually mounted on a card; medium sized buttons 36 on a card, and small buttons for shirts 1 gross per card.

The cheaper grades of buttons are packed in gross lots in cardboard boxes, thereby saving import duties to the extent of the weight of the cardboard on which the better grades are mounted. It is quite natural that importers should be very solicitous about these details of packing, which often determine whether or not they can compete successfully with their rivals. As import duties are levied on all cards, mountings, containers, etc. (except the wooden packing case or outside packing), the lightness in weight of inside wrappers is most essential and should be most carefully looked to.

The European war has stopped the exports of buttons from Germany and Austria, but these sources of supply have rapidly been supplanted by France and Italy (which countries, at the beginning of the war, already enjoyed a large share of the trade), and now Portugal is making a serious effort to obtain a share of this business.

European houses do not usually send emissaries here to solicit orders for buttons. Styles are more usually selected and orders placed from samples submitted by European manufacturers without cost to the local importer. American manufacturers should follow this plan, marking their samples plainly "Amostras sem Valor" (samples without value) and submitting explicit information concerning prices and export discounts.

Our American firms may find it advantageous to introduce their buttons into Brazil by combining with manufacturers of men's and women's wear, who frequently send salesmen to these markets.

Local importers who have been interviewed, and who, at this time, are obtaining supplies from Europe with difficulty, have suggested to me that the following information be furnished by American manufacturers in addition to the samples already mentioned, to enable local importers to judge which types may be advantageously purchased:

Net weight of buttons, without any packing or on any mounting whatsoever.

Weight of buttons, mounted on cards, but exclusive of the cardboard boxes.

Weight of the cardboard boxes.

Total weight of the buttons, mounted on cards, and packed in cardboard boxes.

All weights should be expressed in the metric terms, and the consular declaration should be made in the Portuguese language.

Extremely light-weight buttons are preferable by reason of the specific customs duties on these goods, which are not affected by the invoice value of the shipment, weight alone being reckoned.

The credit terms required here for payments on the importation of buttons are usually a 90 or a 120 day sight draft attached to the shipping document.

The bulk of the buttons imported are received by the wholesale importing firms which carry large stocks on hand. There are also other direct importers, carrying on this business upon a smaller scale, who conduct shops and retail stores. Certain commission firms carry no stock, but they solicit orders locally from the foreign samples which they have on hand, and place these orders with the foreign manufacturers.

BAHIA.

Consul Robert Frazer, Jr.

Although there is no doubt that far greater success would be obtained if American buttons were offered through salesmen than in any other way, and it is believed that the sending of such men would be well worth while, especially if they also brought other sorts of notions, yet buttons seem to be one of the products which, owing to the cheapness and facility of sending samples by mail, could be marketed with the best chances of success without the services of salesmen.

This office recommends that good lines of samples, with attached prices in United States currency f. o. b. New York, be sent to the three or four principal importers, with an offer to sell at 30, or, if possible, 60 days from the acceptance of the draft. It should not be thought that the importations from Europe have ceased, for considerable quantities of buttons are still arriving from both France and Italy—the countries which always were the chief source of supply for this market.

It is recommended that the samples, if small, be sent by ordinary mail and not by parcel post, as there are certain formalities and expenses connected with the latter method here from which the former method is free.

There are no button retailers, as distinct from wholesalers, of much individual importance in Bahia, as the wholesalers also sell at retail and the large consumers buy from them direct.

Practically the whole supply of buttons used here is imported from foreign countries and is not brought from the other States in Brazil. Although there are two or three factories in the country, they do not seriously compete, so far as this city is concerned at least, with the products of the leading European countries or with the United States.

Some of the traveling salesmen who visit this district carry a number of different kinds of notions, and others are sent out directly by the button manufacturers. One of the latter, from a factory in Italy, was met by the writer at the office of an importer where information for this report was being sought.

The terms given by European sellers, as with most lines here, are 90 or 120 days from the acceptance of the draft.

SÃO PAULO.

Vice Consul Robert L. Keiser.

The southern Brazilian market consumes practically all types and qualities of buttons. Some of these, principally bone buttons, are manufactured locally. There is a small domestic industry in wooden, cloth, and composition button manufacture, but the greater part of these latter types are imported from Italy and France at the present time. Germany and Austria have formerly furnished a considerable part of these imports.

The imports of all kinds of buttons at São Paulo for the four years 1911 to 1914 were as follows:

Countries.	1911	1912	1913	1914
Austria	$15,730	$14,229	$27,946	$5,542
Belgium	740	234	....	46
France	50,147	43,380	45,635	11,012
Germany	31,163	36,690	48,457	15,089
Holland	....	....	....	76
Italy	45,185	67,931	54,194	23,652
Japan	361	994	2,027	....
Spain	95	235	1,908	1,935
Switzerland	....	328	....	....
United Kingdom	2,307	3,870	5,949	1,502
United States	983	1,506	1,796	139
Total	146,711	169,397	187,912	58,993

Imports for the period of nine months, January to September, inclusive, for the years 1914 and 1915, were as follows:

Countries.	Jan.-Sept., 1914.	Jan.-Sept., 1915.	Countries.	Jan.-Sept., 1914.	Jan.-Sept., 1915.
Austria	$5,542	$310	Spain	$1,936	....
Belgium	46	....	Switzerland	....	$246
France	10,869	9,749	United Kingdom	1,343	895
Germany	14,663	1,223	United States	3	1,135
Holland	....	12			
Italy	19,586	11,753	Total	53,988	25,323

There are no statistics available showing the domestic production or the imports classified. Black composition and cloth-covered buttons have a great sale. Fancy buttons for waistcoats are also in demand.

Foreign exporters have given from 90 days to 8 months' time for the payment of their drafts. The goods have generally been sold from samples placed in the hands of representatives located here.

BRITISH GUIANA.

Consul George E. Chamberlin, Georgetown.

The buttons used in this consular district are now imported chiefly from England and the United States, and are of a large variety. The pearl button is the most popular and is used in all sizes and qualities, though the chief demand is for the cheaper grades. Glass buttons are next in importance, and are imported in the plain, cheap types principally, but there is some demand for the better grades in fancy designs. Bone and metal buttons are also used to a considerable extent; in fact, the buttons used in this district are practically the same as would be found in the department stores of the United States for use on light-weight clothing. None of these goods are manufactured locally, all being imported.

Buttons are not classified separately in the returns of imports and exports, consequently no statistics are available as to the volume of the trade. The population of the colony is only 300,000, however, and many of the East Indian and native population use few buttons.

England has been the principal source of supply for these goods, although many of them were of German, Austrian, and French manufacture, obtained through English houses. At the present time more American buttons are finding their way into this market.

There are no strictly wholesale houses engaged in this trade. Some of the larger importers carry fairly large stocks and sell at wholesale to the small merchants. It is the custom for the buyers of the larger houses to visit the English markets at certain intervals, when most of their purchases are made. Within the past 12 months, however, more of these goods have been purchased in the United States, either from samples submitted by traveling representatives or local commission agents representing American houses. The usual terms are cash in New York, or open account, 30 or 60 days.

The larger share of this trade is in the hands of the dry-goods stores and men's tailors. Women in this climate wear light dresses, consequently buttons ordinarily used by women's tailors meet with little demand.

CHILE.

VALPARAISO.

Consul General L. J. Keena.

As the button manufacturing industry of Chile is confined to one establishment in Santiago, the local market is chiefly supplied by importation. According to the customs valuations, which are probably 20 per cent below the actual market values, the imports in 1914 amounted to $147,179. For 1912 the total was $213,404 and for 1913 it was $231,551.

Germany has furnished far the largest quantity of buttons imported into Chile, the value being over $82,000 in 1914, according to the customs figures. The trade with Italy amounted to more than $22,000; France, about $13,500; and Great Britain, about $12,700. American manufacturers supplied only $6,879 worth of buttons in 1914, the largest items being shoe buttons and buttons of vegetable ivory. The value of the imports of pearl buttons from the United States was but $354.

The varieties of buttons on the market are horn, or bone, leather-covered, mother-of-pearl, vegetable ivory, wood, metal, shoe buttons, plated metal, glass or china, porcelain, cotton-covered, linen-covered, wool-covered, silk-covered, and paper. The following table shows the value of the imports in 1912, 1913, and 1914:

Classes.	1912	1913	1914	Classes.	1912	1913	1914
Horn or bone buttons	$6,899	$8,260	$3,348	Plated metal	$4,796	$3,746	$3,163
Leather-covered	156	223	136	Glass or china	10,383	15,585	10,235
Mother-of-pearl	45,090	46,256	20,708	Porcelain	1,958	2,220	1,321
Corozo	39,927	43,249	36,563	Cotton-covered	2,535	1,531	451
Wood	2,332	1,886	1,269	Linen-covered	86	39	254
Iron and steel	65,024	50,240	28,790	Wool-covered	2,383	1,581	457
Other metal	19,951	10,448	3,025	Silk-covered	10,249	6,149	3,703
Shoe buttons, hooks and eyes, iron and steel	....	6,173	16,974	Paper	1,635	3,000	1,000
Shoe buttons, hooks and eyes, of other metal	....	30,965	15,782	Total	213,404	231,551	147,179

The general use of black shawls, covering the head and three-quarters the length of the body, on the part of Chilean women of the middle and humbler classes, and of Chilean women of all classes outside of the larger cities, measurably decreases the market for fancy blouse buttons and for buttons for tailor-made clothes. Apart from this it may be taken that Chile presents a normal market for the sale of buttons of all classes; particularly of buttons of the cheaper grades, because the purchasing power of the country is individually small, and to a less extent of buttons which are of high grade or which follow closely some change in the fashions. In this regard it might be well to repeat that Chilean women who follow the changing fashions in women's clothes accept only Paris and London fashions of the latest date and insist upon carrying out the dictates of those fashions in all minor details.

The principal importing houses and the larger department stores all have foreign (European) connections who buy, assemble, and forward stock on order. Since the outbreak of the war, however, even the open European markets have not been in condition to supply the trade in many of these smaller lines. This is particularly true of all types of metal buttons because the European factories formerly producing these goods are now working on Government metal contracts. A metal press button or snap fastener heretofore received in large quantities from Germany and England is now said to be practically unobtainable from those sources, and one large firm is planning to import this and probably other types of buttons from the United States.

As the Chilean houses which have been importing buttons have no purchasing connections in the United States, some difficulty may be experienced in properly placing American buttons on this market. Some results might be obtained by sampling a number of the importing houses, provided that quotations were f. o. b. a United States port or, better, c. i. f. Chilean ports, and based on rather liberal credit terms, say with draft through Chilean bank at 90 days' sight against documents. Special care should be taken in selecting samples so as to give a true idea of the scope of the line to one entirely unacquainted with it. A repeated criticism of the samples in general sent by American houses to Chile is that they are entirely inadequate. As these samples are to take the place and do the work of a salesman, it seems a false economy to send too limited a selection.

A traveling salesman carrying a full line of button samples could in all probability do an excellent business in Chile at present or in the near future. To take orders to advantage from a very widely scattered trade and one in which many of the distributers are houses with small capital, the system followed in this market by some of the British manufacturers of hairpins, hair ornaments, buttons, buckles, etc., would probably prove very successful also for an American button line. The traveling salesmen arrange with some importing house, which may be a house not ordinarily engaged in the button trade, but which is of good financial standing, to act as general commission agents for their lines. These agents and the salesman then figure out c. i. f. prices on the line, including in the price whatever agent's commission may be agreed upon, and they also decide on the credit limits to be given to large and to small dealers enjoying good business reputation. The salesman then covers the territory, selling c. i. f. with favorable credit terms to all classes of the trade, in proportion as credit is merited. The commission agents undertake to guarantee the payment of all accounts accepted, to receive and deliver all shipments, and to remit the amounts collected less their commission. An arrangement is also made sometimes by which the commission agents bunch a number of the small accounts and make a remittance within the time which would entitle them to the customary cash discount from the manufacturer. In this case the commission agent reserves the right to charge interest on the account against the purchaser.

This method of handling accounts makes it possible for the manufacturer to reach more directly the smaller houses in the trade, whose limited capital would make them unsafe risks for direct shipment without the facilities for watching and collecting these accounts which would be afforded by the house acting as a commission agent.

To the best of the knowledge of this office, no salesman has ever come to Chile with lines of American-made buttons.

The retail sale of buttons apart from sales by department stores is divided among a very large number of "paqueterias," or stores handling buttons, hairpins, pins, and small novelties. The average store of this type occupies only some 150 square feet of floor space, and in stock and fixtures would have an investment of only a thousand or two of dollars. They rely directly on the importer for supplies, and in few instances would be able to finance a purchase of stock from abroad.

SANTIAGO.

Robert deF. Boomer, Secretary to Commercial Attaché, Chile.

Though the estimated population of Chile is 3,600,000, fully one-third of this number can almost be disregarded as far as their influence is concerned on the importation of buttons. This third would include the poorest classes, whose amount of clothing is small and contains only the very cheapest buttons made. Moreover, these garments are largely homemade, especially in the country districts, and the buttons probably serve on many successive generations of clothes.

The remainder of the population can be said to dress in general European style, the men using conservative horn, hard-rubber, and cloth-covered buttons, which change very little from season to season. The women's styles vary from year to year, there being at the present time a wide use of buttons in all colors, shapes, and sizes. Two or three years ago few buttons were used on women's clothing. As women now demand varied styles, the materials used in the buttons include glass, mother-of-pearl, silk, cotton, wool, brass, iron and steel, etc. The standard buttons for underwear are mother-of-pearl, bone, and china of the cheaper grades. Mourning buttons are important because of the custom of the country, which requires deep mourning in the case of death in the family. The style in black buttons does not vary as radically as in the colored and fancy article.

Although the available Chilean statistics give no record of any local manufacture of buttons, there has been a small factory in existence in Santiago (Enrique Durret, Fabrica de Botones, Avienida Matta 956) for several years. The factory was visited by the writer, and it was found that the total output amounts to about 20 gross a day. At the present time all the machines are busy with shoe buttons, but bone and mother-of-pearl buttons are also made. The owner states that at present the demand is so great that he could take no orders for anything but shoe buttons for several months. He has already ordered four new machines, which will increase his output to 60 gross a day.

The factory owner states, further, that for other classes of buttons, such as bone or pearl, it is customary for the purchaser to bring a sample of what he wants to have it imitated. There is great difficulty in obtaining good workmen, as there is no other button factory, at least in Santiago, and therefore this manufacturer has to train inexperienced men. Consequently he does not believe that there is any possibility of a sufficiently large increase in his or any other factory's output to meet the demand for some time to come. He has had an offer of financial assistance to build a larger establishment, but has refused to do so chiefly on account of the lack of workmen. The mother-of-pearl which he uses is obtained from Japan and California.

The competition to be met by American manufacturers of buttons is very strong. They must compete against large and well-established wholesale and retail houses, mostly of European origin, which are directly connected with Austrian, German, French, and other manufacturers, and against retail stores which almost invariably send their buyers to the European countries and not to the United States. This customary use of European styles has made American women's clothing not acceptable. An owner of a local store stated that he imported some American dresses and found that he could not sell them. The same difference in styles applies to buttons, the American types, especially for women, being unsuited to the local demands. Such, at least, is the opinion of several dealers questioned.

Still further, the American manufacturer must compete against the traveling salesmen of European factories, who visit the local tailors and retail stores, even in the small towns, and take their small orders. So far as it has been possible to learn, there are no agents, samples, or salesmen of American buttons in Chile. At the present time a demand for American buttons exists because of the European war, but this is necessarily a temporary demand.

The comparative statistics for the first six months of 1914 and 1915 show a decrease of 110,510 pounds in the importation of buttons in the present year. Each of the 15 classifications listed in the statistics shows a decrease, so it is evident that the shortage covers all types. This is more or less substantiated by the dealers, who are selling off old stock and are feeling the shortage, especially in pearl buttons, shoe buttons, and military buttons.

Practically all military buttons and supplies have formerly come from Germany. The manager of the Sociedad Cooperativa Militar states that their supply of buttons is practically exhausted.

It was impossible to learn the number of gross ordered of the different types of buttons, but a rough estimate can be made on the basis of the military forces of Chile for the year 1915. The number is limited by law to 26,914, of which number 8,283 will belong to the standing army, 6,000 to the navy, 9,000 to conscripts for the army and 300 for the navy, 731 to the subaltern personnel of the coast artillery, and 1,800 to the carbineers.

ANTOFAGASTA.

Consul Thomas W. Voetter.

In general it may be stated that the styles of buttons used in the northern part of Chile do not differ radically from those used in the United States.

There are no manufactures of buttons in this district, and no large users, as the ready-made clothing offered for sale is either imported or is made in the central part of Chile, at Valparaiso or Santiago. There are some dressmakers who manufacture simple dresses whenever there is not custom work on hand, but the establishments can not be termed factories and the output is small.

The establishments which make tailored suits for women do not generally carry any stock of buttons, nor do the stores which sell the cloth. The custom is for the purchaser to purchase the cloth in one establishment and the trimmings in another and take all to the tailor who makes the suit. There is quite a marked distinction between the retail establishments which sell dress goods and those which sell trimmings, and it will be well to bear this distinction in mind in preparing to sell to the trade in this country.

The method of purchasing buttons followed by practically all the trade has been to give orders to travelers who carried a full line of samples. These travelers did not represent directly manufacturers of buttons, but were sent out by commission firms, principally of Hamburg and Berlin, who handled the stocks of many manufacturers and could therefore supply their salesmen with large and varied lines of samples. Frequently terms of 120 days credit after acceptance of draft were granted and payments were made through the branches of German banks here. Buttons were frequently consigned in care of these banks. In fact, during this past month one consignment of German buttons was purchased from a bank by one of the notions dealers of Antofagasta. The value of this lot was about $500, and the fact of the sale so long after the outbreak of the war indicates that there are stocks of German goods along this coast. It can not be assumed, therefore, that German competition is not to be reckoned with.

It has been frequently stated to me that the best way to sell buttons here is through travelers who bring samples and take orders. These travelers should not represent just one manufacturer nor carry one class of buttons, but should have as varied an assortment as possible. In choosing the samples for women's clothing they should pay due attention to the fashion plates which show London and Paris styles. It is recommended that these travelers carry also lines of what may be called notions, such as ribbons, embroideries, laces, safety pins, toilet pins, elastic, hosiery, knit underwear, adornments for dresses of all kinds, and the varied articles found in the notions departments of American stores. The travelers would deal with merchants who are interested in all of these articles and with these samples more satisfactory orders could be secured. I have been told that one traveler well equipped with samples of buttons and notions of all kinds succeeded in taking orders for about $35,000 of merchandise in Antofagasta alone in about a week's time.

There is no wholesale house at Antofagasta or in northern Chile selling buttons or tailors' supplies. The only wholesale house of this nature is at Valparaiso. The leading tailors here import their buttons directly, giving their orders to travelers with samples. The smaller shops buy from Valparaiso or from the importing tailors as they need the buttons. Travelers who sell for the tailoring trade should also have samples of pants hooks, etc. The same travelers who sell to supply women's trade could well carry other lines for the tailors. A line of fancy buttons for waistcoats, for instance, may be advisable.

COLOMBIA.

Consul Ross Hazeltine, Cartagena.

The Cartagena consular district is intimately connected with the button industry of the world in that it supplies large quantities of tagua (vegetable ivory) nuts to the button manufacturers of the United States, Germany, and Italy. There is no local manufacture of buttons, however.

The annual imports of buttons are fairly heavy, considering the fact that their use is limited by climatic conditions, and many persons are scantily clad. For this consular district the annual imports are valued at approximately $10,000, of which France, during normal trade conditions, furnished 40 per cent; Germany, 26 per cent; and the United States and Great Britain, 17 per cent each. Statistics available for the last normal fiscal year, ending June 30, 1914, were as follows: France, $4,083; Germany, $2,720; United States, $1,851; Great Britain, $1,838; total, $10,492. The general use of white clothing for men, women, and children exercises a direct influence on the styles of buttons imported. Recently the importation of men's ready-made clothing—Palm Beach, mohair, etc.—from the United States has also affected the foreign purchases of buttons. The market requirements, therefore, are for white buttons almost exclusively. Porcelain, bone, and mother-of-pearl, in the order named, are in greatest demand.

Practically all purchases are made from samples, and importation is direct. The smaller shops and the tailors buy from the importers according to their needs. The principal importers are firms handling textiles.

Conditions have changed notably since the beginning of the European conflict. One of the principal importers informs this office that American manufacturers are now supplying the trade with entire satisfaction. It this connection, however, it may be well to call attention to certain points:

First, samples may be sent by parcel post, and should be properly indicated; second, small orders may also be sent by parcel post; third, the import duties range from $0.20 a kilo, gross weight, to $2 a kilo, and different varieties should not be included in the same package because the import duty on the highest dutiable item will be levied on the whole shipment; fourth, prices may be quoted in American money. The import duties on several grades are as follows:

Item No.	Classification.	Duty per kilo.
261	Glass	$0.25
299	Porcelain	.20
386	Rubber, celluloid	1.50
387	Tagua (vegetable ivory)	.70
419	Mother-of-pearl, tortoise shell, and coral, with holes	1.20
433	Ivory	2.00
1725	Silk-covered	2.00

There is in addition a surtax of 2 per cent of the duty.

Interested American manufacturers are urged to request packing instructions at the time orders are sent, and those instructions should be carefully followed, to the end that customs fines and excessive duties may be avoided.

There is a direct weekly steamship service from New York City and weekly sailings from New Orleans, with transshipment at Cristobal on through bills of lading.

ECUADOR.

Consul General Frederick M. Godlng, Guayaquil.

Ecuador's trade in buttons is for the most part limited to the cheaper staple classes. A few only of the fancy forms are in demand, the materials most favored being pearl shell and ivory nut. Buttons are not manufactured locally, and heretofore a very large percentage was imported from Germany, Great Britain, and France. Practically all of the recent purchases, however, were made in the United States and Japan.

There are no dressmaking establishments in Ecuador, the women's dresses being imported ready made or to order from measurements previously sent, or else made by seamstresses at the homes. The people who use buttons are the tailors and a few women who make children's clothes at their own homes, the goods and supplies being furnished by their employers.

The imports in 1912 amounted to 34,903 pounds, valued at $19,510, and in 1913, 31,933 pounds, valued at $22,641. England, Germany, and Italy were the principal sources of supply, and the principal kinds of buttons imported were vegetable ivory, mother-of-pearl, bone, and metal. The following table shows the quantities and values of each kind:

Classes.	1912		1913	
	Quantity.	Value.	Quantity.	Value.
	Pounds.		*Pounds.*	
Vegetable ivory	5,619	$4,010	5,661	$5,003
Paper	220	16	....	....
Mother-of-pearl	5,978	5,652	6,389	5,828
Porcelain	134	24	....	....
Shirt buttons, not specified	3,245	2,003	1,400	578
Bone	7,833	3,086	6,316	2,796
Glass	293	58	....	....
Gold and plate	1,612	391	....	....
Iron	555	236	....	....
Other metal	714	304	2,608	893
Unclassified	8,700	3,730	9,559	7,543
Total	34.903	19.510	31,933	22,641

The importers purchase from commission houses abroad, making their selections by means of certain fixed numbers representing the various styles, and never buying direct from the manufacturer. Samples are not used in the local trade, the retailer making his selections from the wholesalers' stocks, which are sufficiently large for all demands of the market.

The retail price only could be ascertained in most cases. This ranges from 5 centavos (2.5 cents) to 80 centavos (38 cents) the dozen for the cheaper grades. The fancy buttons have no established prices, some selling for 1.20 sucres ($0.58) per dozen in one place and for 1.80 sucres ($0.87) in another. In other words, the retailer asks the highest price and takes what may be given. The importing merchants refused to quote the prices paid.

As the trend of the trade is now with the United States, and as the goods received give general satisfaction, to hold the market appears to be only a question of continuing to satisfy the market as to quality, and more particularly price. It would be well for American exporters to send samples, with prices and terms, to the firms mentioned in the appended list, and they should always ship goods exactly as instructed by the purchaser; otherwise fines may be imposed.

PARAGUAY.

Consul Samuel Hamilton Wiley, Asuncion.

All the buttons used in Paraguay are imported, and the value of the imports in recent years has been as follows: 1910, $6,223; 1911, $13,376; 1912, $14,064; 1913, $22,616; 1914, $4,684. By far the larger part of these imports came from France and Germany. A few came from Italy and England. The total imported from the United States during the five years mentioned was only $37.

Of staple buttons, the ordinary types in general use in the United States and in Europe are used here. In fancy buttons the styles follow those of Europe, usually being about six months behind. The cheapest grades of buttons sell most largely.

The largest importers of buttons are the general importing houses, which sell to the merchants in the smaller towns and country districts. Their principal imports are buttons of cheap grades made of mother-of-pearl and its imitations, bone, china, porcelain, corozo (palm nut), and wood, with a considerable number of metal buttons of the type called "bachelor's buttons" in cheap grades. This "bachelor's button" is used almost exclusively for trousers of all grades here.

One reason for the lack of demand for expensive buttons is the fact that a large number of the wearers of better-class garments, both men and women, buy their clothing in Buenos Aires, Montevideo, or in Europe.

As this is a hot country, there is a considerable demand for buttons of light-colored materials for use on light clothing. Practically all the poorer people have their clothes made in their homes, where large numbers of small buttons of mother-of-pearl, bone, and china are used.

The following figures, supplied by one of the largest button-importing firms, show the sizes and materials of the buttons which they buy in largest quantities, with the cost prices they are paying (Oct. 6, 1915):

Kinds.	Price per gross.	Kinds.	Price per gross.
Mother-of-pearl:		Bone:	
26 millimeters	$2.31	5½ millimeters	$0.06
26 millimeters	.80	14 millimeters	.14
18 millimeters	.30	Papier-mâché:	
14 millimeters—		6 millimeters	[a].21
Cheap grade	.09	7½ millimeters	[a].26
Better grade	.23	Porcelain, 7 millimeters	[a].35
Wood:		Metal, "bachelor buttons"	$0.60 to .70
14 millimeters	.14		
22 millimeters	.37		
Corozo (vegetable ivory):			
14 millimeters	.21		
22 millimeters	.59		

[a] Per dozen gross.

The greater part of the buttons imported to Paraguay are purchased in European markets by agents or representatives of the importers here, generally commission merchants. The purchase in these cases is consummated in Europe. A large number of buttons are purchased from traveling representatives of European houses carrying samples. Some buttons are purchased from samples sent to importers here by European exporters, either by mail or parcel post.

Practically all the firms in the principal cities of Paraguay who sell buttons import their own stocks. The wholesale importers sell to the small dealers in the small towns and country districts. The amount of buttons purchased by these small dealers would not warrant foreign firms dealing with them direct.

The competition to be met here by American button manufacturers is with French and German exporters, who have established themselves very firmly by studying this market through their traveling salesmen, making buttons to suit the local tastes and prices and giving credit terms to suit the importers. The credit terms are, as a general rule, six months after acceptance of draft.

Owing to the present interference of commerce with European markets, it is probable that some buttons will be imported from the United States. At first only small orders will be sent to meet present demands; the future orders will depend on the treatment received by importers on these initial orders. As the importers in Paraguay are grateful to European exporters for the liberal treatment they have received during the financial stringency since the war, only necessity or advantageous conditions will make them change their markets. If American button manufacturers, however, are prepared to supply the buttons wanted here at prices which compare favorably with those of European exporters, and are prepared to give favorable terms of credit, it is probable that a good market for American buttons can be developed here.

As American buttons are not known in Paraguay, the best method of introduction would be by traveling salesmen carrying a full line of samples. The next best method would be to send samples to importers here, care being taken to have all correspondence, names of buttons, etc., in Spanish, and to set out clearly prices, terms, discounts, etc. It would be a good idea to invite importers here to send samples of the buttons they wish in case they do not find suitable ones among the samples sent.

PERU.

Consul General William H. Handley, Callao-Lima.

There are no manufacturers of buttons of any kind in Peru; therefore the people depend entirely upon foreign sources for supplies. Peruvian customs statistics, as shown in the following table for the years 1913 and 1914, indicate that the value of imports of all classes of buttons is approximately $45,000 a year:

Classes.	Duty per 100 pounds.[a]	Value.	
		1913	1914
Cotton-covered	$52.98	$243	$149
Wool-covered	57.39	210	149
Linen-covered, etc	52.98	10	6
Silk or passementerie, covered	70.64	1,276	1,632
Leather-covered	39.73	321	....
Iron and steel:			
For pants	11.04	2,949	1,375
Other kinds	13.24	3,489	2,039
Copper, bronze or brass:			
With patent base	12.36	876	392
With base, for shoes, clothes, etc	22.07	1,972	865
Military (brass)	70.64	10	1,139
Gilt or plated	132.45	184	6,192
Porcelain and glass:			
For shirts and underwear	7.06	2,915	1,918
Ornamental	14.13	1,733	1,441
Button cores (wooden) for covering	6.62	355	49
Papier-maché or paper	13.24	749	824
Horn, bone, and composition	22.07	3,171	3,470
Rubber, palm nut	44.15	14,254	11,447
Ivory, mother-of-pearl	105.96	8,035	7,753
Ordinary mother-of-pearl	70.64	3,820	2,725
Carriage and shoe buttons of wood, with or without shank	30.90	88	....
Total	....	45,660	43,565
Collar and cuff:			
Copper, not plated	33.11	31	46
Porcelain and glass	21.19	58	63
Rubber and palm nut	57.39	20	983
Horn, bone, and composition	44.14	1,197	1,710
Iron or steel	22.07	360	119
Ivory, mother-of-pearl, combined or not with other materials	176.59	2,993	1,067
Total	....	4,659	3,988

[a] Including weight of immediate container. In addition to the regular customs duties a surtax of 10 per cent of the duty is collected on all imports at the ports of Callao, Salaverry, Paita, and Pisco; and a surtax of 8 per cent at all other parts.

Germany holds by far the greater part of this trade, amounting to $22,195 in 1913, which may be considered as a normal year, while the imports from the United States during 1913 were only $170 and last year $291. Italy practically controls the trade in vegetable ivory buttons.

I was informed by one of the principal importers that the small sales here of the American button may be attributed almost entirely to its high price in comparison with the European article, and to the liberal terms for payments which the German firms allow to the importers.

The materials most in favor for the principal kinds of buttons used here are palm nut, mother-of-pearl, metal, horn, bone, glass, composition, porcelain, and ivory. There is a much larger trade in the small types of novelty buttons, such as are used mostly on women's and children's clothing, both for useful and ornamental purposes. Quite popular is a small black button of several sizes and styles made of jet or jet glass. This is largely due to the taste for black dresses and to the long mourning period observed by the natives, which is two years in most cases. Buttons made of glass in various shapes and bright colors are also popular. These are about the size of a pea and are used for both children's and women's dresses. They cost, delivered in Lima, about 8 cents gold per dozen, retailing at about 25 cents gold per dozen. The small brass military button for ornamentation is also popular.

Another point to be considered in developing this trade is that there are no ready-made clothing establishments here, all men's clothing being made by tailors. Even the servants have their clothes made to order for as low as $6 a suit.

This applies also to women's garments. With one exception, there are no large department stores that have women's tailoring departments such as are found in the United States. Most of the fine women's garments are imported from France ready made. The French styles are chiefly in vogue.

The largest purchases of buttons are made from the European traveling salesmen that pass through Peru about once a year. Orders are given sometimes for the staple articles for quantities lasting from two to three years. Because of the rapid changing of styles of women's novelty and fancy buttons, the shops prefer to buy these from samples furnished periodically.

While the majority of the buttons are bought from the traveling salesmen, there are a number of German firms who send out here three or four times a year small books containing samples of their fancy buttons. They are sent not only to the few wholesale houses here, but also to the principal dry-goods stores, who buy for retail to the small shops in the interior.

As regards credits, I am informed the importer is allowed from six to eight months for the payment of his bill. That is, the bill is divided into three drafts drawn at six, seven, and eight months, and sent through the local bank for collection. The interest is included in the price. The usual rate of merchandise discount allowed in Lima on all classes of buttons is 5 per cent for cash.

The stock of buttons here at the present time is low. Some of the firms have begun to make their purchases in the United States. The samples and catalogues received from American manufacturers would indicate both that American prices are higher than the European article and the terms for payment more severe.

The most practical means of entering this field is to send American salesmen down here with a complete line of staple and fancy buttons. They should speak the Spanish language, and be in a position to meet our German competitors as regards prices and time for payment. A cash business for this trade is practically out of the question at the present time except in a very few cases. After the agent passes through here once and becomes acquainted with the importers, if his prices and terms are reasonable, the American manufacturer could probably thereafter do the business by sending samples at certain periods of the year, as our German competitors have done for many years past.

Japan has recently introduced here an imitation mother-of-pearl button.

L. B. Clark, secretary to the commercial attaché at Lima, furnishes the following information concerning the button trade in Peru:

European firms ship most of their staple buttons in bulk in small pasteboard boxes containing a few gross. All the advertisements and selling literature that I have seen from American firms make a point of the attractive arrangement of the buttons on a fancy card, each card having a dozen or two buttons on it. This does very well for sample selling cards which are to be placed in a show window, but as duties here on buttons are paid on the gross weight of the package this practice is somewhat costly for the buyer when a whole consignment is so packed.

There is a large and steady demand for fancy vest buttons, like those among the accompanying samples, which represent only buttons of moderate cost. There is also a good demand for the finer and more expensive sets, but as these are much higher priced it has been considered that they should be included under jewelry, especially as they are chiefly handled by jewelry concerns.

Another line for which there is a good and increasing demand here is that for shoes and women's pumps and slippers. Shoemaking as a home industry is well established in Peru and the present stocks of these buttons, which are used for decorating purposes on a lavish scale, are very much depleted right now.

Germany and Italy are the real competitors whom American manufacturers will have to meet, with a strong "comer" in Japan. The Japanese are shipping at low prices. At present their production is practically confined to shell buttons, but through indirect shipments the Island Kingdom has been selling more buttons in Peru than the official import statistics would indicate.

VENEZUELA.

LA GUAIRA.

Consul Homer Brett.

The buttons most largely used in Venezuela are those suitable for women's clothing of white goods or cotton prints and for men's washable clothing of duck, denim, and khaki cloth. Washing is usually done by pounding upon stones and the consumption of buttons is relatively greater than where gentler laundry methods prevail. Bone, vegetable ivory, and mother-of-pearl are most favored button materials, metal being but little used.

No buttons are manufactured in Venezuela. The Compañia Industrial de Manzanares, located at Cumana, has machinery for the manufacture of buttons from the shells of coconuts, but the factory, although built and equipped, has no money with which to begin operations. Probably every known type of button is imported, the staple ones being indistinguishable from those used in the United States, while in buttons for women's clothing there is no fixed type and novelties are always in demand.

All buttons except those containing gold, silver, silk, ivory, or tortoise shell are in the fifth customs classification and pay duties and surtaxes amounting to $17.13 per 100 pounds gross weight. The latter provision is one deserving the closest attention, for from the statements of weights and values of imports it is evident that some other countries manage to pack their buttons much more lightly than our exporters do.

From the statistics following it would appear that the trade in buttons in Venezuela is rapidly disappearing. It is probably true that there was a great overimportation in 1912, but the real explanation of the diminishing figures is the extension and greater use of the parcel post. Importations made by this means do not enter into statistics and it is a method especially adapted to the button trade. Merchants in La Guaira, Maracaibo, Puerto Cabello, Ciudad Bolivar, and Carupano are able to order from samples and receive their merchandise without the troubles and dangers connected with consular invoices and ordinary customs clearances. A representative of an American manufacturer informed the consulate that none of the buttons sold by him had been imported in any other manner than by parcel post.

The following tables show the imports of buttons into Venezuela for the years 1911, 1912, and 1913, and for the six-month periods January to June and July to December, 1914, and January to June, 1915:

Countries.	1911		1912		1913	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.		*Pounds.*		*Pounds.*	
Belgium	224	$42	515	$125	136	$37
France	24,517	14,447	21,866	12,140	16,016	10,066
Germany	33,988	28,278	44,924	34,829	32,424	22,874
Italy	10,221	9,151	14,804	11,941	18,328	12,590
Netherlands	5,665	4,562	11,207	5,833	4,505	2,257
Spain	3,115	1,218	3,285	1,300	1,943	1,154
Trinidad	....	....	....	....	154	31
United Kingdom	2,924	1,862	4,600	2,875	1,896	1,756
United States	1,901	1,254	1,030	1,580	3,324	4,735
Total	82,555	60,814	102,231	70,623	78,726	55,500

Countries.	1914				1915	
	January-June.		July-December.		January-June.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.		*Pounds.*		*Pounds.*	
Belgium	246	$66	....	....	....	....
France	8,345	3,456	1,284	$891	1,730	$1,554
Germany	9,123	5,510	1,158	1,033	....	....
Italy	9,370	3,772	2,330	1,433	2,022	1,253
Netherlands	1,762	2,141	485	361	2,417	2,122
Spain	2,134	1,134	2,550	1,488	325	175
United Kingdom	1,234	565	264	103	297	147
United States	1,379	1,375	1,511	564	1,236	438
Total	33,593	18,019	9,582	5,873	8,027	5,689

As may be seen, Germany leads in the trade, with Italy having passed France and still gaining. It is probable, also, that the buttons credited to the Netherlands were of German manufacture. Venezuela does not require certificates of origin and imports are credited to the port from which shipped. A German importer stated that many of the buttons sold here by his firm were made in Japan.

The competition to be met is largely one of price and credits. Button making appears to be a cheap-labor industry, and unless there have been recent developments in the machinery the United States would seem handicapped in competition with Germany, Italy, Japan, and Spain.

The great mass of buttons used in Venezuela are, or were, imported directly by wholesale merchants of Hamburg who have branches in Venezuela. They sell to retailers on three months' credit. There is no other system of selling goods as effective as this. The buyer sees his goods, has no trouble writing letters, estimating freights, waiting for goods, or paying landing charges. He does not need to know what the duties are and has no fear that the customs authorities will fine him for a mistake in the consular invoice. He accepts the goods at his door and agrees to pay for them in three months. Naturally, he pays for this service, but it is a very great service and he is willing to pay.

There are numerous merchants who go abroad every year to purchase for their establishments; formerly many went to Paris, now practically all go to New York. There are one or two firms that maintain buyers in New York. There are few, if any, purchases of buttons made from samples sent direct to the merchant, as large merchants are too few and small ones too numerous for this method to be profitable. It is not believed that any commercial traveler handling buttons only has ever visited Venezuela, though Spanish travelers representing general exporters have buttons among other lines. Italian buttons are sold by a resident agent in Caracas, and most of the French buttons are sold by one firm which acts as agent and also imports for its own purposes.

The usual credits from European shippers are six months. The representative of an American firm stated that this was of more importance in Venezuela than price or quality or anything else. He said that his house was willing to give only four months from date of invoice, and that was not sufficient; that he was certain that with six months' credits he could get all the trade in the country, but he had not yet been able to get this concession.

It should be noted that in parcel-post shipments it is frequently three weeks or a month after the steamer has arrived before goods can be obtained by the addressees.

There is no doubt that the supply of buttons is very low in Venezuela, and there is no question of creating a demand for American buttons in this market. The demand already exists and was growing, and while the statistics indicate that American trade has decreased, this is probably not the fact. Buttons are in the fifth customs class, of which well over 4 tons came to Venezuela by parcel post in the first six months of 1915; undoubtedly many buttons were included.

The most practicable method of entering this market would be by the appointment of a resident agent to visit the trade and solicit orders. If a method of combining shipments and delivering merchandise to buyers, duties paid, could be established it would be a great inducement to merchants to purchase from the concern offering such accommodation.

MARACAIBO.

Consul G. K. Donald.

On account of high duties, practically no ready-made clothing is imported at Maracaibo; hence the imports of buttons as a separate article are considerable in proportion to the size and population of the district. No buttons are manufactured locally. All kinds and sizes are used, but the most common are those of bone, mother-of-pearl, and ivory nut.

Bone buttons are imported from France, Spain, Italy, United States, and Austria, packed either in light cardboard boxes or in small cloth or paper bags. They come in three sizes, 6, 6½, and 7. The consular declaration is "botones de hueso." As in the United States, they are used here for underwear, suspender buttons, etc.

Mother-of-pearl buttons come in innumerable sizes from France, Spain, and Austria. They are either sewed on cardboard sheets or in bulk. The commonest sizes are 22, 24, 28, 30. The large sizes are used for men's coats, the smaller sizes for women's underwear. The consular declaration is "botones de nácar."

Buttons of ivory nut come mostly from Germany, in bulk in small cardboard boxes of, say, 1 gross to the box. The sizes are 22, 24, 28, 30. They are used largely for men's coats of serge and other heavy cloths. Black is the commonest color. The consular declaration is "botones no especificados, sin nada de oro, plata, seda, marfil, ni carey."

Porcelain, glass, and numerous other kinds of buttons are imported. Porcelain buttons, sizes 12, 14, 16, come from Germany, Austria, and France. The consular declaration is the same as that for ivory-nut buttons.

Patent fasteners are used extensively for women's and even men's underwear and for plackets in women's dresses. They come from Germany and the United States.

Collar and cuff buttons come from Germany, France, and the United States. American buttons cost more, but the quality is so much better that the higher price is willingly paid. They are generally gold plated, there being no market for solid gold.

The actual users of buttons do not import them, but buy from the few firms that do import. The importers purchase directly from samples and also an occasional traveling salesman. Three months are the terms generally given.

There are no large users of buttons. Women's clothing is all made by dressmakers or the wearers themselves. There are countless men's tailors, who buy buttons from the dry goods stores as they need them.

Chapter VI.—EUROPE.

AUSTRIA-HUNGARY.[1]

REICHENBERG.

Consul Nicholas R. Snyder.

Northern Bohemia is noted throughout the world as a center for the manufacture of buttons of almost every known type, chiefly vegetable ivory, metal, glass, galalith, silk, linen and cotton covered crochet buttons, and cloth-covered buttons. Statistics as to production are not obtainable, but the exports to the United States amounted to $104,183 in 1911, $339,471 in 1912, $649,075 in 1913, and $456,633 in 1914. The principal purchasers are the United States, Germany, England, Russia, Balkan States, the Orient, and South America.

Fully 80 per cent of the output of this industry is produced by home or house workers. With the machinery now in use the factories are unable to compete with this house industry; consequently there are no very large factories in the district.

There are no firms that use foreign buttons, and no large department stores nor agencies representing either Paris or London tailors. The bulk of the trade is done by firms handling tailors' supplies.

PRAGUE.

Consul Charles L. Hoover.

The manufacture of buttons is carried on in 27 factories in this district and gives direct employment in normal times to about 5,000 people. All kinds of buttons are made, including lead, snap fasteners, glass, enamel, rubber, buckhorn, wood, horn, bone, leather, linen, metal, paper, mother-of-pearl, porcelain, celluloid, composition, papier-mâché, vegetable ivory, tin, and zinc and thread buttons, and forms.

The classes of buttons which are imported to the greatest extent are fancy buttons for women's costumes from Germany, cheap vegetable ivory buttons from Italy and papier-mâché shoe buttons from Germany. Some fancy buttons for men's clothing, such as pressed leather buttons, are imported, but the taste of the people is almost exclusively for quiet, conventional clothing and the orders for such "fantasie" buttons, as they are called, would be insignificant. The prices of all classes of buttons seem unbelievably cheap, and inasmuch as most qualities are made here and exported to all parts of the world it is not likely that American buttons can compete in this market. This is especially true of glove buttons, as the manufacture of this class of buttons is one of Prague's largest industries.

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[1] While the war continues trade reports from Austria-Hungary and Germany are necessarily meager Official statistics for the past two years are unobtainable, and manufacturers decline to furnish information concerning their business. As these are the foremost button-producing countries, however, American manufacturers would have relatively little interest in them as prospective markets.

Sales by foreign houses in this district are made mostly by agents in this country. These agents are not engaged solely in the sale of this one line, but are generally wholesalers of materials belonging to the same general line of merchandise as buttons. For instance, shoe buttons are handled almost exclusively by wholesalers of shoe findings, buttons for men's clothes by wholesalers of tailors' supplies, and buttons for women's costumes by dealers in trimmings and similar supplies. It may be said, therefore, that most sales are made in this market by indirect importation through local jobbers and wholesalers.

The customary terms are 5 per cent for cash within 60 days or net in 6 months.

Buttons are used in this district to about the same extent as in localities in the United States where there are no large manufactures of clothing.

The types of buttons for the various classes of clothing used differ materially. For men's clothing of finer qualities vegetable ivory, hard rubber, and pressed leather buttons are employed and are named here in the order of their importance. Metal buttons are used exclusively on working clothes and the cheaper grades of trousers.

On women's costumes the buttons are either of fancy metal and celluloid, metal, or wood forms covered with the material from which the costume is made, or of metal alone. There is a wide range of qualities in those made of metal and celluloid.

On the finer qualities of men's underwear, pearl buttons, which are extensively manufactured in Bohemia, are used. Cloth-covered metal disks and porcelain or white glass buttons are also used for cheaper qualities. For women's underwear a button made up of a small metal ring with a crocheted covering is used. The cover is crocheted directly on the ring and the manufacture of these buttons is an important industry in the mountain districts of Bohemia.

For shoes there is a considerable variety in form, color, and material, but the great bulk of those used are plain black papier-mâché buttons with a simple metal loop fastener, the shank of the metal loop being imbedded in the papier-mâché. The other materials employed are celluloid, vegetable ivory, and horn. Buttons for children's shoes are made of papier-mâché in 43 different colors, the supply coming entirely from Germany. The price was only 1 crown (crown=$0.203) per "mass" of 12 gross before the war. As the fancy buttons, which are made of horn, vegetable ivory, and celluloid, are used only on fancy-top shoes, the demand for them is small. The supply comes from Germany, and the prices before the war were as follows: Celluloid buttons, colored, 1.46 crowns ($0.296) to 2 crowns ($0.40) per gross. Vegetable ivory, in 10 different colors, metal shank of fastener passing clear through the button and ending in a small metal head or being covered by an imitation jewel, 1.30 crowns ($0.26) per gross. Horn buttons, in 10 colors, shank of metal fastener passing clear through button and ending in a small metal head, 1.40 crowns ($0.284) per dozen.

Large quantities of glove buttons, most of them of the metal-snap fastener variety, are used in the factories in this district. Sometimes celluloid, pearl, and horn are used for the part which has the appearance of being a button.

CARLSBAD.

Consul Wallace J. Young.

While button making is an important Bohemian industry, the production in this consular district is not large comparatively. At Tachau, Falkenau, and Graslitz the manufacturer of mother-of-pearl buttons is extensive, although now declining. In 1910 and 1911 there were 2,200 workmen employed at these three places. In 1912 there were 1,400, in 1913 there were 600, and at present there are but 500. In 1910 and 1911 about 1,000,000 kilos (2,200,000 pounds) of shell were used, with a production of 2,000,000 gross of buttons; in 1913 the consumption of shell amounted to 485,000 kilos (1,069,000 pounds), with a production of 1,113,000 gross of buttons.

This steady decline before the war is attributed chiefly to the competition from other countries, especially Italy, Spain, Russia, and North America, in all of which the button industry has been developing rapidly in recent years. A diminishing supply of mussel shells is doubtless also a factor, for it is stated that there is little hope that the price of the raw material will fall, since the shell industry of the Red Sea has declined.

The glove manufacturers are probably the largest consumers of buttons in this district, but there are also important lingerie and men's shirt manufacturers who use large quantities, especially of pearl buttons.

For the cheaper grade of gloves, snap (press) buttons, usually with celluloid, metal, or vegetable ivory tops, are used almost entirely, except on white and chamois gloves. For the better grade of men's gloves, in addition to these types, horn and mother-of-pearl snap buttons also are considerably used, although the sewed-on buttons are much in vogue. The better grade women's gloves have, for the most part, sewed-on buttons, except, however, those for the German, Scandinavian, Dutch, and American markets, which, also, are made with snap buttons.

Large, first quality mother-of-pearl buttons, suitable for the best quality of men's white and chamois gloves, at present (Jan. 4, 1916) sell wholesale at 12 crowns ($2.40) per gross, the similar grade suitable for women's gloves, at 9.60 crowns ($1.94) per gross. Smaller and second-grade mother-of-pearl buttons used on the cheaper quality of gloves and on moderate-priced linens sell at 4.60 crowns to 1.20 crowns ($0.93 to $0.24) per gross.

The Tachau Bezirk (county) manufactures wooden button molds as well as pearl buttons, the average annual production in normal years being valued at $160,000 to $200,000. Vegetable ivory buttons are made at Karbitz, near Teplitz, in this consular district. For the years 1911, 1912, and 1913 the average production of such buttons for this Bezirk is placed at 700,000 gross, valued at $280,000.

Thread and cloth buttons are not made to any considerable extent in this consular district. The principal tailoring firms obtain their button supplies almost entirely from Vienna, Prague, and Reichenberg houses.

I am informed that for all practical purposes the only class of buttons imported into this part of Bohemia are snap buttons for gloves. Those made in Germany with celluloid tops enjoy a fair sale, and by some of the glove makers are considered better than the similar buttons of Austrian make. Just at the present time the exportation of these from Germany is forbidden, and Austrian glove makers must depend entirely upon home manufacture.

Buttons fluctuate greatly in price. The wholesale prices of snap buttons for gloves are at present (Jan. 4, 1916) as follows: With both parts metal, 2.20 crowns ($0.44) per gross; with celluloid tops, 2 to 4.95 crowns ($0.40 to $1) per gross; with vegetable ivory tops, 2.50 crowns ($0.50) per gross.

The German snap buttons are bought generally direct from the factories, from samples. The factories here sell from samples, some direct and some through agents. One firm which does a fair business with the United States makes such sales entirely through a German agent.

In the button trade the usual terms are 2 per cent for cash in 30 days, all bills payable in 60 to 90 days.

BELGIUM.

Consul General Henry W. Diederich, Antwerp.

At the present time consumers of buttons are using what stock they had on hand and supplying themselves when more are needed from the stock that the wholesale dealers still have. At this moment there is no competition in the market.

Before the war such goods were purchased by indirect importation through jobbers and wholesalers in Brussels, who imported them from Germany, France, Austria, and England.

All sorts of buttons known to the trade are used in this district, but it can not be said that there is a market for the article, as there are no jobbers or wholesalers located here; the retailers, department stores, tailors, dressmakers, and haberdashers purchase their stock according to their needs. To introduce the American manufactured article on this market successfully when business is resumed a thorough knowledge of prices and conditions of sale prevailing in Germany, Austria, France and England will be essential. Much will also depend upon the commercial treaties after the conclusion of peace.

The tradespeople are not at present considering plans for the future. But I once more draw attention to what I consider most necessary for the successful introduction of American manufactured goods into Belgium after the revival of business, and that is their presence on the spot. American goods can not gain a hold on the market in the face of the competition to be expected if the manufacturers or their representatives do not follow the example of their competitors and come themselves into the field with their samples. The argument that the distance is great and the expense heavy is of no avail. The English, French, German and Austrian manufacturers send their own salesmen, familiar with the languages of the country, from one business house to the other, and are capable of arguing unrepresented manufacturers out of the market. In short, the button industry and market in Antwerp may be said to be on the same footing as in any provincial city of the United States of the same size, with this exception, that here there are no jobbing houses. The competition may be said to be similar and the struggle as keen.

DENMARK.

Consul General E. D. Winslow, Copenhagen.

There are no button manufactures in Denmark. A few buttons are made by hand, but no industry exists as compared with the great activity in this branch in England, France and Germany.

Practically the entire supply is imported, statistics of importation for 1911, 1912, and 1913 being as follows:

Countries.	1911	1912	1913
	Pounds.	*Pounds.*	*Pounds.*
Austria-Hungary	20,507	15,214	22,060
Germany	113,600	138,695	153,468
Italy	15,215	16,537	21,168
Japan	6,395	3,528	7,938
United Kingdom	3,087	3,749	7,938
United States	882	7,056	9.486
Other countries	1,103	1,764	3,748
Total	160,789	186,543	225,806

The total value in 1911 was $78,256; in 1912, $90,584; in 1913, $109,880.

Business can be done in this Kingdom by American manufacturers if prices are as low and terms as good as those of the countries at present supplying the Danish trade. There is a demand for buttons of all descriptions. A button made in England with a canvas tuft instead of a metal shank, thus subjecting the buttonholes and the garment itself to less injury, is much in use.

Buttons covered with silk, having a pattern in the center, are good sellers. "Threefold" linen buttons are considered by housewives indispensable for underclothing, since neither washing nor mangling destroys them.

Buttons made of hoof and horn under the name of horn buttons are extensively used. Tweed clothing and fabrics in imitation of it have, through the necessity of matching their various colors, led to the importation of buttons made of celluloid and vegetable ivory.

Pearl buttons have long been a leading branch. Metal buttons are not relatively so important and are not a prominent section of the trade, but they are a numerous class, including those used for uniforms and trousers and fancy buttons which are gilt, stamped, chased, or enameled and many cheap varieties in iron and other metals. Numerous kinds of composition buttons are also imported.

Glass buttons are in demand, and Bohemia and France are the leading exporters of this class of goods. Porcelain buttons come almost exclusively from France. Vulcanite buttons, as they are known here, which are made extensively in the United States, are much sought after.

Buttons with holes—"four holes," "three holes," and "two holes"—made of pearl shell, wood, bone, ivory, or metal have a good sale.

Germany seems to supply the Danish trade with the cheaper kinds of fancy buttons. Danish firms make their purchases in many different ways, namely, by direct purchases made and consummated in the exporting country, by direct importation through purchases made from samples, or by indirect importations through dealers and by samples shown by traveling salesmen. From 60 to 90 days are the customary terms.

FRANCE.

Consul General A. M. Thackara, Paris.

The manufacture of buttons in France is an industry which is well developed. Many varieties are produced annually in large quantities, both for home consumption and for export to foreign countries. The materials used are mother-of-pearl, bone, and horn, polished, enameled, or colored metals, porcelain, glass, jet, vegetable ivory, or corozo nut, ivory, tortoise shell, celluloid, wood, coverings made of silk, mohair, linen, and other textiles, leather, precious metals, and stones.

Paris is the great center for the manufacture of buttons, but principally for fancy, artistic products to suit the existing fashions in women's and men's clothing. Other centers of production are the Department of Oise, notably at Beauvais and Meru, for the manufacture of corozo, bone, and mother-of-pearl buttons; the Department of Loiret for porcelain buttons; the Departments of Aisne and Indre-et-Loire for corozo buttons; Department of Haute Garonne for bone buttons; and Departments of Charente, Vosges, Maine-et-Loire, and Isere for pearl buttons. In the latter Department snap or press buttons are also manufactured, principally at Grenoble.

No statistics are available as to the actual production of buttons in France, but the Syndicate of French Button Manufacturers estimates that the value of the total output of staple buttons in a normal year would range from 30,000,000 to 35,000,000 francs ($5,790,000 to $6,755,000), and of fancy buttons 15,000,000 francs ($2,895,000), thus making a total production of $8,685,000 to $9,650,000. It is estimated that the falling off in the production of fancy buttons during the war is fully compensated by the increased output of the cheaper varieties for military and naval purposes.

Notwithstanding the fact that all classes of buttons are produced in France for local consumption and for export to other countries, many types are also imported. The foreign receipts consist principally of the staple varieties made from earthenware, glass, porcelain, mother-of-pearl, bone, horn, etc., the countries of origin being England, Germany, Austria, and Japan. The exports of the latter country to France consist almost entirely of mother-of-pearl.

In the following tables are shown the French imports and exports of buttons, with the countries from which and to which they were shipped, for the years 1912 and 1913, the last two normal years for which detailed figures have been published. In 1912 the customs statistics did not subdivide buttons according to class.

Countries.	Quantity.	Countries.	Quantity
1912.	*Metric tons.*	1912.	*Metric tons.*
Austria-Hungary	29.1	United Kingdom	14.1
Germany	201.1	Other foreign countries	3.5
Italy	9.4		
Japan	2.0	Total quantity	260.4
Switzerland	1.2	Total value	$298,630

Countries and classification.	Quantity.
1913.	
	Metric tons.
Porcelain, earthenware, jet, bone, and trouser and shoe buttons:	
Austria-Hungary	16.7
Germany	62.5
Italy	4.1
Switzerland	.3
Other countries	4.8
Total quantity	88.4
Total value	$129,665
Snap or press buttons:	
Germany	47.1
Other countries	1.7
Total quantity	48.8
Total value	$94,184
Fancy buttons, metal, covered or not:	
Austria-Hungary	11.1
Germany	17.9
Italy	.1
United Kingdom	5.1
Total quantity	34.2
Total value	$91,088
1913.	
	Metric tons.
Buttons covered with passementerie:	
Germany	3.8
Other countries	.9
Total quantity	4.7
Total value	$16,327
Glass, horn, vegetable ivory, wood, etc.:	
Austria-Hungary	8.1
Germany	88.4
Italy	21.0
Switzerland	1.4
Other countries	7.6
Total quantity	126.5
Total value	$610,362
Mother-of-pearl, ivory, tortoise and other shells:	
Austria-Hungary	3.6
Germany	9.2
Japan	1.4
Other countries	.2
Total quantity	14.4
Total value	$250,128

The total quantity of buttons imported into France in 1912 was 260.4 metric tons, having a value of $298,630. The total quantity in 1913 was 317 metric tons, with a value of $1,191,754.

For the exports from France the official statistics do not indicate the quantity of each class, the shipments to foreign countries being included under the general heading of buttons as follows:

Countries.	Quantity.	
	1912	1913
	Met. tons.	*Met. tons.*
Argentina	99.0	56.6
Belgium	110.5	100.9
Brazil	61.1	46.2
Egypt	39.3	50.6
French colonies	80.0	100.3
Germany	90.3	94.0
Mexico	38.5	32.0
Portugal	32.9	24.9
Spain	82.6	67.9
Turkey	36.7	36.9
United Kingdom	304.8	401.0
United States	280.1	226.4
Other countries	173.8	167.3
Total quantity	1,429.6	1,405.0
Total value	$2,441,828	$2,399,810

The value of the declared exports of buttons from the Paris consulate general in 1913 was $318,653, as compared with $329,728 in 1914. In the first nine months of 1915 the declared value was $56,773 against $297,260 during the same period in 1914. The principal varieties were agate, glass, metal, pearl and shell, and silk.

The complete statistics for the year 1914 have not yet been given, but the total imports amounted to 3,246,000 francs ($626,478) while the exports reached 8,153,000 francs ($1,573,529).

The great factors in the competition which American buttons will meet in the French market are low prices and the lower rates of duty enjoyed by the European exporter. As will be seen from the above tables, the principal foreign source of supply in France before the war was Germany. Owing to the low cost of production and to the fact that under the provisions of the French tariff American buttons exported to France pay at least 50 per cent more duty than buttons from Germany and other countries enjoying the minimum tariff, the German button manufacturer could place his products on the French market at prices which the American exporter would find difficult to meet. For instance, the French duty on pearl buttons up to 12 millimeters, coming from Germany, is 700 francs ($135.10) per 100 kilos (220.46 pounds), while on American pearl buttons the duty is 1,500 francs ($289.50), or 114 per cent more.[1]

With the strong competition of Germany and Austria removed, if the American manufacturers can make proper prices and terms, there would appear to be an excellent opportunity for extending the sale of American buttons in the French market.

Purchases of foreign buttons in France are made mostly by indirect importation through sales made from samples submitted by local agents or traveling salesmen. Commission agents do not sell at their own risk, but there is a special class, known as "agents-dépositaires," who carry stock which the manufacturers invoice to them, and who sell for their own account. These firms may be compared to jobbers. (For list see p. 163.)

Prices are quoted in French currency for the goods delivered at the destination, including duties and all charges. The customary terms are drafts or bills of exchange at sight, 30, or 60 days, or by check after the receipt of goods. A cash discount of 2 to 3 per cent is generally given for sight or 30 days, not counting the month in which the goods were bought.

The principal users of buttons are department stores with ready-made garment departments, and dry-goods stores making a specialty of men and women's clothing.

BORDEAUX.

Consul George A. Bucklin.

In normal times vegetable ivory buttons are imported from Italy, but otherwise the buttons for men's clothing are supplied by domestic manufacturers. No shortage in any of these types exists at present because of the abundance of old stocks on hand. There is, however, a shortage in the supply of metal press buttons, formerly imported from Germany to a considerable extent, and at present only partially supplied from Grenoble, France. The staple varieties of buttons for women's garments are also furnished by French manufacturers, but there is now a demand for small glass buttons, principally for women's blouses, and of black jet and amber buttons, which were formerly obtained from Austria.

In this region buttons of all descriptions are bought from the manufacturer by wholesale haberdashers, who in their turn supply the small trade. Large retail stores may be classed as wholesalers, and they, too, buy from the maker. Extreme novelties are often sold to the smart tailoring trade by the maker, in which instance gross profits of 50 to 100 per cent are made.

It is customary for travelers to visit the wholesale and large retail dealers, and often a collection of buttons is shown as a side line by a traveler calling for a cloth house. Terms vary considerably, for wholesalers and large retailers from 30 days 2½ per cent to 5 per cent, 90 days net. Women's tailors, when buying high-priced fancy buttons, may receive 30 days 5 per cent in most cases.

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[1] The above statement applies to tariff conditions before the war. "Trading with the enemy" being now forbidden by the French Government, Germany and Austria no longer receive the benefit of the minimum tariff.

GRENOBLE.

Consul Thomas D. Davis.

Grenoble is of considerable importance in France as a center for the manufacture of kid and leather gloves, a large portion of which are exported to the United States. This industry uses a great many metal buttons. Pearl, celluloid, glass, and cloth buttons are also much favored in this locality for men's and women's clothing and mercery.

Some buttons are imported for the last-mentioned uses, but the quantity is negligible, as the demand is satisfactorily supplied by French factories. There are in the city of Grenoble and vicinity some 15 button factories, large and small (among the most important of which is one that is affiliated with a company in the United States). This concern manufactures a metal snap button or fastener for gloves, which has considerable vogue in France and in the United States. The large local demand for glove buttons has stimulated the button-making industry in general to such an extent that practically all styles and qualities of buttons for which there is any demand are being furnished by the home factories. Rather large quantities of metal and other buttons are exported, some of them finding a market in the United States.

It may be interesting to note that the manufacturers of metal buttons in this district are making an effort to get in touch with American concerns that can furnish them with brass tape or brass strips in rolls suitable for working in metal-button machines. There is, however, no present indication of a lack of raw material for the making of the other classes of buttons, and there is no immediate prospect of developing any considerable demand for American buttons in this part of France, though if such should be attempted it will be necesssary to meet the requirements as to terms and prices exacted by local dealers or reach them indirectly through the Paris firms that supply them.

Most provincial towns of France rely for their imported supplies upon the larger distributing centers, such as Paris, Lyon, Marseille, and Havre, for the reason that they are, as a rule, unwilling to take upon themselves the responsibility of importing directly. This arises from the difficulty of getting the merchandise through the customs, the inconvenience of land transport, and the consequent uncertainty of being able to determine accurately the final cost until the goods are landed in the local warehouse.

It is to this problem, which applies equally to all merchandise sought to be sold in the provincial districts of France, that the American exporter must address himself if he expects to compete permanently with the merchants of other countries. If he can sufficiently master the question of customs and carriage rates to quote the local merchant a price in francs at which the goods can be delivered at his door, he will be able to interest him in his goods. If this is impossible, then at least offers should be made c. i. f. a French port. If possible personal representatives should visit the interior cities, show samples, and quote prices, when practical, at which goods can be delivered at the railway station of the purchaser. The Germans and Austrians realize the importance of this, and it is undoubtedly due to this policy that they came to enjoy a decided preponderance of the foreign trade. They not infrequently quoted prices in francs at which articles of which samples were shown would be delivered at the door of the local merchant with all charges fully paid.

The usual terms in this district are two to three months, with a 2 to 5 per cent discount for cash.

HAVRE.

Consul John Ball Osborne.

The buttons imported into this consular district before the war were those made of corozo nuts or vegetable ivory, which came prinpally from Austria-Hungary. There is only one factory, which is located near Caen and makes horn buttons only. The imports of buttons at Havre in 1913 amounted to 11,684 pounds.

Havre is a very important receiving point also for corozo nuts, the imports in 1913 amounting to 12,183,800 pounds. This was almost the entire French importation of this commodity, the total quantity being 12,664,600 pounds.

Firms using foreign buttons make their purchases direct from manufacturers' agents having branches and carrying stocks in Paris or from traveling salesmen who visit the trade frequently.

LYON.

Consul John J. Ernster.

There are good chances for American manufacturers to develop a considerable trade in France, provided the articles submitted please the French taste and the prices are as low as possible. It is suggested that as all French fashions originate in Paris, American firms should have agents in that city who would be able to keep their firms posted on the styles and types of buttons that are most likely to find a good sale in France. These agents should at all times have an important stock of common and fancy buttons on hand for reassortment.

Among the buttons made of metal "boutons-pression," or snap buttons, were imported in large quantity from Germany. This source of supply being now unavailable there is actually a considerable demand for such buttons, and it is certain that the United States could build up a very important trade in that line.

Another line which would be interesting for American manufacturers is that of hatpins, the head of the pins being exactly the same as the buttons, but with a hole drilled in the middle underneath to hold the metal pin. The tops of the hatpins were made in Austria and Germany, and the agents or commercial travelers took orders for them from samples of the buttons. The heads were imported without the pin, which was made by local manufacturers, thus saving the customs duties on the pin itself.

Cuff buttons were also imported in large quantities from Austria and Germany, and it is the opinion of merchants here that the

United States can compete easily regarding quality and prices of these articles.

It must be borne in mind that in order to get a strong foothold in this market it will be necessary for Americans to use the same methods of sale as those employed by Austrian and German manufacturers. For instance, all the sales were made free of all charges to destination. The dealer who had placed an order in Austria or Germany knew exactly the amount he had to pay for the goods delivered at his store. He had no customs formalities to attend to, the manufacturer or his agent taking charge of this matter. The packing was never charged to the purchasers. In fact, French purchasers prefer to pay a little more money than to take the trouble of attending to the transportation, customs formalities, etc.

All the purchases from foreign countries were made from samples shown by local agents and by commercial travelers, the latter being in the habit of visiting their customers at least three times a year. The conditions of payment were at 30 days, not counting the month in which the purchases were made, with a regular discount of 2 per cent, and sometimes an allowance of about 1 per cent more, according to the importance of the orders.

Among the different classes of users of buttons in this vicinity, women's tailors, department stores with ready-made garment departments, and women's ready-made garment stores seem to do the bulk of the trade, principally in fancy buttons and snap buttons.

MARSEILLE.

Consul Alphonse Gaulin.

Domestic products have for many years dominated this market, except for metal and glass buttons. Until the war the metal buttons, including snap fasteners, came mostly from Germany, and the fancy glass buttons principally from Bohemia. This competition has now completely ceased. Since the outbreak of the war Italy and Spain have supplied practically all the local demand for foreign-made buttons, which consisted principally of buttons for army uniforms. The Marseille customhouse returns show that the imports entered for domestic consumption, which amounted to but 400 pounds in 1914, increased to 7,760 pounds in 1915. Italy furnished nearly all of the 1915 imports, only a small proportion being of Spanish manufacture.

Several inquiries have been made by Marseille dealers concerning snap buttons for the millinery trade. One manufacturer could sell large quantities of these buttons in the district. Fancy metal and glass buttons of American manufacture would also find a profitable market here, provided deliveries could be made at moderate prices.

In this district the firms that use foreign buttons make their purchases, as a rule, through local wholesalers, who obtain their supplies through commercial travelers who visit the provincial trade periodically. These commercial travelers, who either represent the manufacturers or their sales agents in Paris, also sell to the leading retailers. There are no local agents of foreign manufacturers. Representation in Paris and the employment of commercial travelers appear to be required in order to establish and maintain a permanent trade in this line.

The numerous small shops, called "merceries," which specialize in dress trimmings and furnishings, and the tailor and dry-goods stores with tailoring depots, do the great bulk of the retail button business in the district.

NANTES.

Consul Clarence Corrigan.

Probably 75 per cent of the buttons used in the Nantes district are made of corozo, this material being as easily manipulated as rubber, and the corozo button considered the strongest made. Of the imports of this class of button before the war, 75 per cent came from Austria and Germany. The remaining 25 per cent was produced by French manufacturers, principally at Langeais. It may be said that normally buttons of all kinds are used in this region; that is to say, none of the local industries calls for any special type.

The Nantes district is one of the largest manufacturing centers of black and white bone buttons in France. Some 25 years ago this industry was centered at Tours, but it has since been purchased outright by a single concern here at Nantes, the firm of Pilon, Buffet, Durand-Gasselin & Co. This firm formerly purchased bones for the manufacture of glue and kindred substances and for the making of fertilizer. The reason for transferring the button industry from Tours to Nantes seems to have been the necessity of utilizing to advantage the increasing quantity of bones that were available. By the addition of the button-manufacturing plant the local firm utilized the sound part of the bone for the making of buttons and the residue for the other products mentioned.

The annual production of white and black bone buttons in this district during the past five years has been 50 tons, or about 80,000,000 buttons. The total production is shipped to the Paris wholesale dealers in mercery and haberdashery, who are the distributers of these products. The same system of centralization at Paris is adopted for the button industry as for so many other French manufactures. In fact, the retail trade of this city, the tailors, dry-goods stores, mercers, etc., are supplied with buttons by the Paris wholesalers.

A considerable quantity of buttons manufactured here is purchased by State institutions. A large proportion is exported to South America and to the French colonies. As all this business, however, passes through Paris, there are absolutely no local figures to indicate the quantity of imports or exports.

Before the outbreak of the war fancy buttons of all kinds were imported directly into this district from Austria and Germany, principally Austria. The importation was made through purchases from samples shown by an agent. The agents made their headquarters in Paris. One who may be cited as an example was a Frenchman who came to Nantes whenever occasion demanded with a full line of sample buttons. Prices were quoted delivered to the buyer at Nantes, and all customs formalities were accomplished by the seller's brokers at the various ports of entry to this country. The buyer had nothing to do but await the goods. Terms were 30 days from delivery of goods and 3 per cent.

In the last year some buttons have been imported from England, but these shipments have been accidental and have no bearing on the local market. In general they have been for military use. At the present time the buttons formerly imported from Austria are replaced by French buttons made in various towns, principally near Paris. Briare, in the Department of Loiret, is said to be an important center. Broadly speaking, the prices of these fancy French buttons are 15 per cent higher than those formerly paid for the Austrian products. It should be added that even before the war it was cheaper to purchase buttons directly from Austria or Germany than it was to buy them from the French distributers.

A difficulty that affects this industry at present is the question of dyes. Colored buttons formerly imported were very satisfactory in this regard, but the French manufacturers do not seem to have attained the same results. Indeed, one of the principal wholesale and retail dealers in supplies of this sort at Nantes has told me personally that dyes on goods now purchased can no longer be guaranteed.

There should be a good opening for fancy American buttons, providing the American manufacturers could offer the same facilities that other importers offered before the war. The French producers will naturally make every effort to hold for themselves the trade that formerly went to Austria and Germany. It will therefore be more than ever a question of price and terms. If the American producers could establish depots at Paris, and if traveling agents could come to Nantes, showing samples with prices c. i. f. and proper terms, such producers should compete favorably with the French manufacturers, especially in view of the fact that the American dyes are becoming better known and more appreciated.

ROUEN.

Consul Albro L. Burnell.

Besides the normal use of buttons as might be expected by a prosperous and advanced population of about 1,360,000, buttons are extensively used in this part of France in the manufacture of men's cotton flannel shirts and cotton drawers, women's cotton waists and chemises, men's working clothes of drilling, and men's, boys', and children's outside garments of mixed cotton and woolen goods and of cotton velvet or corduroy. The city of Amiens, where cotton velvet or corduroy is especially made, is an important center for the production of cheap ready-made garments for men, boys, and children.

Buttons used here are principally of corozo for men's, boys', and children's garments and women's dresses and cloaks; of horn, largely for men's overcoats and women's dresses; of metal, for men's trousers, and fancy metal buttons for women's dresses; of celluloid, to imitate corozo, for cheap ready-made clothing; buttons covered with silk or woolen cloth for men's evening dress (these are not much in vogue for women's dresses); of mother-of-pearl for fancy buttons for men's waistcoats, women's dresses, and for men's shirts (four holes); of "faïence" (four holes) for men's cheap shirts; of paper for shoes; and of bone, wood, jet (black and colored), glass, etc.

Corozo buttons were largely imported prior to the war from Austria-Hungary. The best grades were obtained from Bohemia, especially from Bodenbach. Purchases could also be made from branch houses of Austro-Hungarian firms established in and about Paris.

No very appreciable amount of buttons is manufactured in this consular district. The Department of Oise is by far the principal source of supply of domestic buttons of bone, mother of pearl, and silk-covered buttons, and, to some extent, of corozo. Paris and its vicinity are important sources of supply of metal buttons for men's trousers and of fancy metal buttons for women's dresses. Corozo buttons from the Department of Loir-et-Cher, an important region for their manufacture, are said to be of excellent quality and to have formerly been made there by Austrian workmen employed by French manufacturers.

Customs statistics do not show that buttons have been imported through this port during the past five years, and the exports which do appear for that period were probably from the Department of Oise and from Paris. Besides buttons of French manufacture, and formerly of Austro-Hungarian make, Italian-made buttons are used to some extent here in the manufacture of cheap ready-made clothing.

At present competition in the button industry is almost wholly confined to meeting domestic production, previously strong Austro-Hungarian competition having been eliminated by reason of the war. An important local dealer in buttons states that Austro-Hungarian manufacturers were probably doing, before the war, no less than 50 per cent of the trade here, and one of the best tailors in the city places their share of the business as high as 75 per cent in corozo buttons. Their prices, as compared with those of French manufacturers, were very low, and they furnished both high-grade and low-grade buttons of this material. About the only low-grade corozo buttons on the market were of Austro-Hungarian origin. Austrian manufacturers were also supplying the trade with very cheap celluloid buttons in imitation of those made of corozo.

Aside from some competition with Italian-made buttons, in view of the elimination of Austro-Hungarian production from this market and disturbed local industrial conditions, it seems likely that American manufacturers of buttons meeting local requirements will find here a profitable demand for some of their production. For some time after the war, even, competition in this trade is not likely to be very severe for American manufacturers.

There are no firms in this region which deal exclusively in buttons either for their own account or as representatives of manufacturers of buttons, although such firms do exist in Paris. Buttons are sold by dealers in tailors' and dressmakers' supplies and by wholesale haberdashers. These dealers are supplied by French manufacturers and Paris houses who reach the trade by traveling salesmen. Austro-Hungarian firms used even to sell their goods directly to tailors and so eliminate the jobber altogether. The local trade appears never to have been visited by other than French and Austro-Hungarian representatives.

Austro-Hungarian firms granted long credits, large discounts, and were easy on their clients in making collections, but sales terms generally are payment in 30 days from the end of the month in which the sale is made, with discounts of 3 per cent or 5 per cent, or in 90 days with or without discounts.

GERMANY.[1]

HAMBURG.

Consul General Henry H. Morgan.

The button industry of Germany, which is probably the largest in the world, is centered principally in Saxony and the Rhine Province. Many millions of metal buttons are manufactured for military use, and there is scarcely any other hard substance, organic or inorganic, which is not utilized in Germany for the manufacture of buttons. Button-making materials, especially the ivory or corozo nut, are imported in immense quantities at Hamburg, beyond even the needs of the German button manufacturers. Hamburg is, in fact, the largest market for button-making materials in the world.

Statistics of the production of buttons in Germany are not available since 1913, and such figures as are obtainable for all Germany for that year do not separate buttons from other articles made of the same materials. Over-sea trade in buttons at Hamburg, however, is shown for 1913 in the following table:

Countries.	Pounds.	Value.
IMPORTS.		
Belgium	34,613	$6,992
Bremen	22,928	9,444
France	62,391	21,137
Italy	53,352	26,823
Japan	293,215	391,450
Spain	8,157	3,306
United Kingdom	42,549	35,809
United States	77,162	34,286
All other countries	4,849	1,667
Total	599,216	530,914
EXPORTS.		
Argentina	652,348	321,490
Australia	287,483	168,366
Bolivia	14,330	8,435
Brazil	423,949	292,607
Bremen	8,818	5,564
British India	425,051	138,971
British South Africa	23,589	7,430
British South and Central America	7,275	7,057
Canada	157,190	124,160
Canary Islands	10,582	3,199
Chile	175,267	85,670
China, not elsewhere specified	78,925	35,593
Kiaochow	7,055	1,518
Hongkong	93,476	58,405
Colombia	52,690	30,526
Costa Rica	8,818	3,510
Cuba	39,022	24,390
Denmark	23,589	13,623
Dominican Republic	11,023	6,359
East Africa	20,283	3,806
EXPORTS—continued.		
Ecuador	16,314	$10,144
France	15,212	2,868
French possessions in Asia	13,007	4,777
Guatemala	18,960	8,968
Honduras	8,157	6,664
Japan	73,855	47,431
Mexico	176,370	93,732
Netherlands' possessions in Asia	202,384	103,735
Nicaragua	10,803	5,281
Norway	130,514	70,550
Panama	10,582	7,392
Paraguay	13,007	12,119
Peru	55,997	27,858
Philippines	16,535	8,711
Portugal	66,800	66,861
Russia:		
Baltic ports (except Finland)	78,044	30,226
Finland	9,480	7,564
Black Sea ports	24,912	3,815
Salvador	7,275	3,501
Siam	5,071	2,356
Spain	77,382	29,015
Sweden	38,581	27,475
Turkey in Europe	19,621	6,931
United Kingdom	652,127	347,299
United States	271,609	147,493
Uruguay	92,815	50,327
Venezuela	35,053	27,739
West Africa	25,133	7,656
All other countries	33,689	13,852
Total	1,720,052	2,523,019

The mother-of-pearl industry was formerly monopolized by the Vienna manufacturers, and during the middle of the last century the United States was the largest importer from the Austrian works.

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[1] While the war continues trade reports from Austria-Hungary and Germany are necessarily meager. Official statistics for the past two years are unobtainable, and manufacturers decline to furnish information concerning their business. As these are the foremost button-producing countries, however, American manufacturers would have relatively little interest in them as prospective markets.

The manufacture of this class of buttons was then undertaken by a large number of works in Lower Austria, Bohemia, and Moravia, and from 1870 on. Saxony, Berlin, and Hanover entered energetically into the competition. About 1890, however, the establishment of pearl-button factories in the United States began to cut down the American demand for pearl buttons from Europe, which were soon practically excluded from the American markets by the competition of the native product.

Only ivory-nut, glass, and pearl buttons have been imported into Germany to any extent. Purchases are usually made from samples and by direct importation through wholesale dealers. As a general rule the terms are 30 days' draft, although the time is extended in many cases to six months or longer. The duty on ivory-nut buttons from America is $10.71 per 220 pounds.

The wages of button sawyers and turners run from $1.66 to $7.14 per week.

AIX LA CHAPELLE.

Consul Henry C. A. Damm.

Some buttons of vegetable ivory, used largely for men's clothing, are imported from Italy because cheaper than the German product, but most of the buttons of this kind are manufactured in Germany. Glass buttons of fancy designs are imported from Bohemia.

Two factories in this consular district (Herzogenrath) make buttons from feldspar, known as agate buttons, also as porcelain or china buttons, mostly used for cheap dresses and underwear. Perhaps the greater part of all such buttons used in Germany are manufactured by these two firms. They are made in endless variety of sizes, shapes, and colors. Imitations of pearl, mother-of-pearl, and bone are produced. One of the firms exports to the United States agate buttons to the value of $20,000 to $25,000 annually.

A large firm (at Stolberg, Rhine Province) manufactures metal dress fasteners, exporting large quantities to the United States each year. These local firms export also to other European countries and to South America.

A local dealer in buttons stated that last year he was offered American glass buttons, but he saw no reason to buy them, because they were no cheaper than the Bohemian and because he can obtain a supply from Bohemia more quickly, hence need not lay in stock, and can always get the latest fashions and novelties on short notice. A better opportunity for American manufacturers might be in the line of standard types of buttons, such as used for men's ready-made clothing and women's garments, and made of vegetable ivory, metal, or papier-mâché. The ready-made clothing industry is not of great importance in this district, though Muenchen-Gladbach has fairly large concerns of this character, where chiefly cheap workmen's clothes are made. It seems impossible that American agate buttons could successfully compete with the local factories already mentioned.

The women's tailors carry no stock of buttons for their better quality garments but purchase for each garment from the department stores, which carry a large assortment, or from tailors' supply stores. The ready-made garment manufacturers also buy in this manner. The department and supply stores purchase from German and foreign manufacturers, or their agents, from samples.

Men's tailors, since standard types are concerned, often buy from manufacturers direct, and often even small shops have their names stamped on the trouser buttons. In this city, where there is a very large factory population, the ready-made clothing stores do the bulk of the trade.

It should also be stated that considerable buying of tailors' supplies is done cooperatively.

BERLIN.

Consul General Julius G. Lay.

In normal times, buttons are one of the most important articles of commerce invoiced at the Berlin consulate general for export to the United States. The city directory of Berlin and its suburbs for 1915 lists 155 button manufacturers, whose products include buttons of wood, horn, metal, pearl, celluloid, glass, ivory nut, cuff buttons, buttons of textile materials, and patent fasteners. Besides buttons themselves, button forms, button-making machinery, and button materials are also manufactured locally in large quantities.

As the German button industry is largely dependent upon the export trade with foreign countries, the imports are small, and there is small chance for American manufacturers to compete with the German products in Germany. The trade statistics show that few American buttons are imported, and most of those that do find a market are of new varieties and protected by patents.

Many of the raw materials used for the manufacture of buttons in Germany are imported from distant countries; for instance, ivory nuts and pearl shells originate in Ecuador, Central America, Brazil, Ceylon, West Africa, Venezuela, Zanzibar, and the islands of the southern Pacific. Most of the importation of these materials takes place at Hamburg, although small consignments are received indirectly through neighboring countries and at other German ports.[1]

The small quantities of foreign buttons which find a sale in Germany are brought into the market either by general agents or by sales from samples. A few large wholesalers and department stores buy directly by means of catalogues when samples are submitted. The usual terms of sale, such as 90 days' credit and 2 per cent discount for cash, are not observed in the button industry because of the varied assortments offered for sale and the large discounts and rebates given to firms purchasing large quantities.

A prominent Berlin button manufacturer informs me that he sends representatives abroad to investigate markets. Having found a market, he does not sell to a single firm, but to many. In New York alone this manufacturer has 8 or 10 purchasers, who, in turn, sell to the large New York firms. Buyers often come to Germany to attend exhibits or to buy individually.

No regular catalogues or price lists are issued, but sales are made largely from samples and from price quotations given in letters. Complete sets of samples are not sent out in large quantities unless particular requests are made, as such sample outfits are rather expensive if many types are manufactured, and are not always returned. German manufacturers often export their buttons in a "knocked-down" condition to obtain a lower rate of duty; for instance, only covers for buttons are exported at one time, so that duty would only have to be paid on an unfinished article.

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[1] See Consul General Skinner's reports published in Daily Commerce Reports Jan. 6 and May 11, 1914, on "German Trade in Button-making Materials."

BRESLAU.

Consul Harry G. Seltzer.

The general use of buttons in the Breslau consular district is similar to that in the United States. In Upper Silesia, where there is a large Polish element, shawls are worn rather than coats, but buttons are used upon the women's dresses for ornament only.

Breslau and Schweidnitz contain the only button factories of importance in this district, and their products consist mostly of metal and vegetable ivory buttons. The types of buttons imported are mother-of-pearl, from France, Japan, and Austria-Hungary; bone and horn, from Italy and Austria-Hungary; ivory nut, from Italy and Austria-Hungary; glass, from Austria-Hungary, and iron and porcelain buttons. In the six months from January to June, 1914, the value of the imports of mother-of-pearl buttons reached $350,098; bone and horn buttons, $28,560; ivory nut buttons, $291,550; glass buttons, $140,896. The figures for iron and porcelain buttons are included with other wares.

The exports of buttons are almost equal to the imports, the figures for the first six months of 1914 being as follows: Mother-of-pearl, $250,852; bone and horn, $130,186; ivory nut, $352,240; and glass, $59,262, besides iron and porcelain buttons not separately recorded.

The war has probably had no effect upon the industry in general, and even if the export trade has been cut off entirely the corresponding imports have also been restricted, so that there are and will continue to be sufficient buttons in Germany for all immediate and future needs and the former exporters will find a ready market at home for their surplus production.

There would seem to be no great possibilities of developing a trade in buttons in Germany, but whatever may be accomplished can best be done through the large dealers. Prices and terms will play an important part in these efforts, but under present conditions it is difficult to present any comparisons in prices because of the fluctuating exchange rates, and terms would probably be largely influenced by shipping conditions. So long as the war continues and until normal exchange rates again prevail, it is advisable to quote prices in American dollars and give no guaranties as to delivery.

From personal inquiries made to the largest firms in this city who use buttons it was learned that women's tailors generally purchase their supplies of buttons from a large dealer in Breslau, with whom they have an arrangement by which they may return unused or obsolete stock. Some also buy from foreign houses. Very few buy from the manufacturers direct. A large manufacturer reports that he occasionally sells buttons to foreign jobbers, but that the best part of his trade is confined to domestic dealers and wholesalers. He further advises that the best way to reach the consumer is through the large jobbers.

LEIPZIG.

Consul William P. Kent.

Buttons of every variety, fancy and staple, are manufactured here, and besides the great number of German manufacturers selling directly through their salesmen to retailers and consumers there are wholesale houses and exporters in many of the principal cities. Retail stores for the usual types of buttons are to be found in every city or town.

Novelties in fancy buttons, however, if brought to the attention of interested persons upon the right occasion—for instance, at the Leipzig fairs—will always receive consideration, especially among the wholesale dealers, women's tailoring departments, and ready-made garment factories.

PLAUEN.

Consul M. J. Hendrick.

Buttons are used mostly in this consular district by tailors and dressmakers and in the home. There are no wholesale manufacturers of clothing, either men's or women's. Pearl and crochet buttons are most favored. With the exception of two glove manufacturers at Johannesgeorgstadt (L. Cohn and "La Tosca"), who import press buttons from Austria, all buttons used are purchased either from one small local manufacturer (Louis Stimmung, Zwickau), who makes only pearl and crochet buttons of medium and larger size; from either of two small jobbing houses who handle all kinds of tailors' supplies; from a Berlin manufacturer, or from large wholesalers at Berlin or Leipzig.

The direct importation of foreign goods by dealers in this district is practically nil, and no buttons of any kind are directly imported from the United States. All dealers who handle American products purchase them from Berlin, Hamburg, Leipzig, or Bremen importers, and, while no statistics are available, the total value of such imports is considerable. At present few articles are offered for sale as the products of foreign countries; when such are offered no mention is made of the country of origin. This is not, therefore, an opportune time to try to establish a direct trade in American products with retail dealers in this district. It is possible that a limited market might be found by thoroughly and regularly canvassing the trade here through traveling salesmen, but even were conditions normal it is doubtful whether such efforts would result profitably, the sources of supply being already established at larger centers.

Exports of buttons from this district to the United States during recent years were as follows: 1911, $2,316; 1912, $11,733; 1913, $10,724; 1914, $6,320; total, $31,093.

Wholesale prices for buttons are as follows (April 5, 1916):

	Per gross.
Crochet buttons:	
Plain	$0.47
Fancy, black or blue	1.42
Extra fancy, assorted colors	1.66

	Per gross.
Pearl buttons:	
Plain, size 8 millimeters	$0.47
Plain, size 10 millimeters	.57
Colored, size 8 millimeters	.52
Colored, size 10 millimeters	.64
Bone buttons:	
Plain	$0.09–.59
Black or dark blue	.11–.71

Credit terms are usually 30 days, 2 per cent off; 60 to 90 days, net.

GREECE.

ATHENS.

Consul General Alexander W. Weddell.

There is a factory at Piræus for the manufacture of iron buttons and at Athens a similar establishment for horn buttons. All expensive kinds of buttons—glazed, polished mother-of-pearl, etc.—are imported.

American button manufacturers entering this territory would encounter a very severe competition from the 25 or more agents representing German, Austrian, and other manufacturers. In matters of credit the German firms lead all others, and among themselves there is understood to be close bidding to secure business. Catalogue prices, however, vary but slightly, the fluctuations of supply and demand being regulated by changes in the discount rate from list prices.

It is not believed that in normal times, except under radically changed methods, that American buttons would sell here any more than the English ones, for which sporadic attempts have been made to establish a market. It may be mentioned, however, that just at present, because of the international situation, buyers are rather looking to England and are beginning to make purchases through their agents in Manchester.

Purchases of buttons in the markets of this district are made by indirect importation arranged after examination of samples submitted by local agents. These agents are supplied with a rich and varied assortment of buttons, armed with which they visit the entire trade soliciting orders.

The terms offered are very liberal, a credit of from six to eight months being not uncommon. Importers generally demand c. i. f. prices. It seems apposite here to press home the dislike felt by the Grecian buyer for f. o. b. prices; they prefer to pay more and to be assured of the exact expense they are incurring, rather than to meet the uncertainty of freight charges, especially in a time like the present.

SALONIKI.

Consul Alfred N. Thomson.

The button industry is not highly developed in this district. A relatively small part of the population have the clothing requirements of the western European. The value of the annual market requirements for buttons is estimated at $35,000. Only a very small quantity of buttons (all cloth covered) are manufactured locally. The buttons commonly used are the glass, bone, horn, metal, metal and nacre varieties, mostly of German and Austro-Hungarian origin.

While the present war has interrupted the trade of Germany and Austria in most commodities which they formerly placed on this market, the trade in buttons has not been seriously affected, as such commodities are attached to cards which can readily be sent to this market by parcel post. At the present time, however, local button agents of foreign manufacturers require a deposit of about 30 per cent with order and the balance upon arrival of the goods. In a few cases credit has been opened in Germany and Austria-Hungary. American button manufacturers desiring to enter this market at the present time are advised to insist on the latter method of payment, or cash f. o. b. New York, as a moratorium has been in force in this district since the Balkan Wars, making it difficult to ascertain the financial standing of local firms.

It is believed that under normal conditions there is small opportunity for the introduction of American buttons in this territory, as the German and Austro-Hungarian trade in these commodities is highly systematized here, and the proximity of those nations, as well as their well-developed credit facilities, would preclude American competition. The demands of the local market are for cheap wares. Quality plays only a secondary role. In order to compete with European firms it would be necessary for the American manufacturer to place a very cheap grade of buttons on this market. Furthermore, the manufacturer would have to maintain one of his own men in the field to keep constantly in touch with subagents and study the demands of the local consumers as well as their financial and business standing. Saloniki firms usually make direct purchases from German and Austrian manufacturers from samples shown by local or traveling agents. After viewing the samples, the local firm orders, through the agent, from the manufacturer, who grants from four to six months' credit.

ITALY.

Consul Roger C. Tredwell, Turin.

There are 55 factories in Italy which make buttons of amber, coral, horn, bone, hoofs, ivory, mother-of-pearl, tortoise shell, vegetable ivory, wood, horsehair, leather, celluloid, gutta-percha, and cloth, There are other establishments, of which the number is not at present ascertainable, which make buttons of papier-mâché, metal, porcelain, and glass as by-products. The statistics of the production for all Italy are not available, but the export trade is large, as will be seen from the accompanying table. The entire button industry employs 5,870 persons.

The button industry of Piedmont is not relatively important, although a few of the factories share to a small extent in the export trade of horn, bone, and vegetable ivory buttons. Seven establishments fall within the first group named above, and there are 14 others which make buttons of some description. The seven factories give employment to 265 persons. Six of them use mechanical motive power. The complete returns are three hydraulic motors with a total of 15 horsepower, one gas motor of 4 horsepower, and nine electric motors with a total of 79 horsepower. They make principally horn buttons.

The following table shows the Italian exports and imports of buttons in 1913 and in 1914:

Kinds.	1913		1914	
	Quantity.	Value.	Quantity.	Value.
EXPORTS.	*Pounds.*		*Pounds.*	
Papier-mâché, etc			3,086	$621
Horn	200,841	$131,867	89,508	58,768
Bone	105,601	87,825	117,065	97,359
Corozo	4,329,856	3,032,416	3,245,181	2,130,720
Wool covered	220	162		
Mother-of-pearl	4,530	9,915	2,493	5,457
Porcelain, enamel, and glass	339,732	32,715	177,472	17,090
Silk covered			101,192	1,063
Total	4,980,780	3,294,900	3,735,997	2,311,078
IMPORTS.				
Papier-mâché, etc	74,296	14,959	86,421	17,400
Horn	5,291	3,474	3,527	2,316
Bone	3,307	2,750	1,984	1,650
Cotton			661	324
Wool	882	648	882	648
Mother-of-pearl	242,167	530,002	197,658	432,614
Porcelain, enamel, or glass	45,636	4,395	95,681	9,214
Silk	5,386	5,658	5,234	5,498
Total	376,965	561,886	392,048	469,664

Italy's entire export trade in papier-mâché buttons is with Tunis. The largest purchasers of Italian horn buttons are Great Britain, Germany, Austria-Hungary, Switzerland, France, Belgium, and Denmark, and the best markets for bone buttons are British India, Germany, Austria-Hungary, Greece, European Turkey, Panama, the United States, and Argentina. Corozo, or vegetable-ivory buttons, which are far the largest item in Italian button exports, go chiefly to Great Britain, but Austria, Germany, Russia, Switzerland, India, Argentina, and Brazil are also important purchasers. The exports of mother-of-pearl buttons go chiefly to Great Britain, to Aden, Egypt, Germany, Austria, and the United States. The principal markets for porcelain and glass buttons are British India and Ceylon, Belgium, Great Britain, Egypt, Roumania, and Asiatic Turkey. All of the exports of silk buttons go to China.

The largest item in Italy's button imports is mother-of-pearl buttons, which have been purchased chiefly in Austria-Hungary and Germany, as have also porcelain and glass buttons and, in fact, practically all of the imports except some horn buttons from Great Britain.

All types of buttons are sold in this district, particularly metal buttons for the clothes of the laboring man, papier-mâché buttons, which have been extensively used on uniforms for the Italian soldiers; celluloid, bone, and glass for women's clothing; horn and vegetable ivory for men's suits; and the usual types for all kinds of undergarments. Apparently the only opportunity for profitable business in American buttons in Italy, however, would be with mother-of-pearl and papier-mâché, of which the more important sources of supply are now closed to the Italian importer.

FLORENCE.

Consul F. T. F. Dumont.

Up to the time of the outbreak of war in Europe, buttons made of vegetable ivory, horn, bone, and porcelain were exported to all parts of the world, especially to Germany, Great Britain, and Austria-Hungary. After that time exports to Germany and Austria were very small, stopping completely with the entrance of Italy into the war. Trade with Great Britain remained about normal. The war increased the demand from Spain, however.

Piacenza, an important manufacturing city in this consular district, is a button-manufacturing center, particularly of buttons made from vegetable ivory. Many of its principal manufacturers have branch factories in other consular districts. A heavy export trade is done in buttons manufactured from the seeds of the "palma dum" (*Hyphaene nodularia*), obtained from Eritrea and Upper Egypt, and the "corozo" (*Phytelaphas macrocarpo*), obtained from equatorial America, particularly from Ecuador, seeds from which country make superior qualities of buttons. Because of intensified competition and sudden changes in fashions in 1913 manufacturers had on hand heavy stocks of unsold goods which they were obliged to carry over into 1914. When the war broke out in August, 1914, the abnormal conditions which prevailed became more complicated, foreign markets were almost closed, foreign credits were unavailable, and many factories closed their doors. After the crisis passed factories were reopened and a demand sprang up for cheap buttons for military purposes, but many factories are still running on half time. In spite of the increased price of raw materials, fuel, dyes, etc., prices of finished goods are the same and the industry is in a crippled condition.

A search for new markets is being made with some success. Germany and Austria were the chief competitors of Italy and furnished a somewhat superior button.

Certain buttons in general use are imported from foreign countries, and a market exists for shoe buttons (made of paper), mother-of-pearl, agate glass, and automatic metal buttons (bachelor). The trade which formerly obtained the greater part of its supplies of these from Germany and Austria will gladly turn to American manufacturers for them if our manufacturers will adopt European sales methods. Bachelor buttons are particularly in demand and prices have risen over 200 per cent. Of buttons generally, cheap, showy types with good patterns are demanded. Durability is a secondary consideration.

Buttons made of horn, bone, and wood are extensively manufactured here, and no market for foreign buttons made from these materials can be obtained. If obtained, it is not likely that it could be held for any length of time. Metal buttons are also extensively manufactured at Bologna, in this consular district, and supply the local demand. There are also numerous small factories in Italy making porcelain buttons.

The prices given below are those at which wholesalers in Florence are offered goods f. o. b. Florence, packing excluded, net of discounts and on liberal credit terms (Sept. 9, 1915):

Kinds.	Price per gross.	Kinds.	Price per gross.
Wood (to be covered)	$0.231 -$0.463	Mother-of-pearl:	
Shoe:		First quality	$0.289 -$2.316
Black	.386 - .482	Second quality	.086 - .231
Colored	.772 - 1.158	Agate glass, white	.019 - .086
Horn	.0965- .154	Porcelain, pearl colored	.038 - .154
Stuff, only in black	.0772- .579	Celluloid (seldom used)	.096 - .772
Metal:		Glass or crystal, fancy shapes and colors, but carried only when fashion requires, no price quoted.	
Bachelor	.25 - .694		
For trousers	.579 - .965		
Bone, cheap grade	.048 - .154	Vegetable ivory, solid colors, striped, or mixed	.193 - 1.930 .231 - 2.895

Shoe, bachelor, metal, and celluloid buttons were imported from Germany, Switzerland, Holland, and France; mother-of-pearl buttons from Austria, Germany, Japan, France, and Great Britain; agate glass buttons from Austria, Germany, and France; while all silk-covered buttons were imported from Germany. The market in all of these is open to American manufacturers. Wholesale selling prices are 50 per cent higher than the buying prices quoted.

Wholesalers in general buy directly from the manufacturer on a running account; others buy at 90 and 120 days from delivery of goods. These methods obtain, however, only between Italian manufacturers and wholesalers. Purchases from foreign manufacturers are made through general agents in Milan or Turin on net cash at 90 and 120 days. Many Italian manufacturers as well as the general agents of foreign manufacturers maintain a force of traveling men who call upon wholesalers from four to six times a year. If necessary, these traveling men collect accounts and carry samples.

Wholesalers in this consular district are accustomed to buying foreign goods on time and through general agencies located either in Milan, Turin, or Genoa. It is extremely unlikely that any other methods would be acceptable. In view of the small stock of metal bachelor buttons on hand, it is possible that cash sales might be made to some of them in this class of goods.

LEGHORN.

Consul Roger C. Tredwell.

The centers of the button industry in Italy are Milan, Piacenza, and Brescia, and the materials used are vegetable ivory, bone, horn, and mother-of-pearl. Of the 55 factories in the Kingdom there are only two small and unimportant ones in this consular district.

The button industry is now recovering from the severe setback which it received after the outbreak of hostilities in Europe in 1914. It suffered, as did many others, from the cancellation of orders, the closing of the principal markets, and the difficulty of receiving remittances from abroad. Recently, however, there has been a noteworthy improvement in the export trade, which is attributed to the renewal of sales to some of the European countries, Central and South America, and British India, and to better transportation services and insurance facilities.

The wholesale prices of buttons are regulated by a trust with headquarters at Milan and are not obtainable, but notwithstanding the recent improvement in this trade, it is understood that the prices have advanced but little, owing to a strong competition in other countries. Consequently the profits of the manufacturer have been limited, for the cost of labor has increased and the prices for all of the articles and materials necessary to the industry have advanced. Some branches of the trade have benefited from the activities developed in new markets and have had the advantage of orders to furnish buttons to the army.

The two factories in this district are situated in the Province of Lucca, and manufacture bone buttons from the tibia or shin bone of Italian and to a small extent of imported cattle. Only a limited amount of local capital is invested in these establishments, and although they have been operating for about a quarter of a century, and have been favored by a plentiful supply of labor and hydraulic power, there has been but little development during the past 10 years.

Since 1911, when the hygienic regulations, put into force on account of the cholera epidemic, made the purchase of bone more difficult, there has been a notable increase in the price of the raw material. This crisis was followed in 1913 by a general slackness in trade which resulted in an overproduction of buttons in all the branches. This was attributed to the changes in the mode and fashions as well as to the bad conditions which prevailed generally in the banking and commercial world.

The normal production of bone buttons in these factories is about 300,000 gross per annum, which are sold principally in central and southern Italy and Sardinia. Small quantities are also exported through Leghorn and Genoa to Germany and Austria, to which countries there has been a small but steady growth in the exportation of bone buttons during the past five years. The average value of this type of button exported has been 950 lire per quintal ($183.35 per 220 pounds).

It is not believed that there is any opportunity to introduce American buttons of vegetable ivory, bone, or horn into Italy at the present time, since the national output is apparently sufficient to meet the demand. In fact the Italian manufacturers, who before the war found a market for their products in all parts of Europe, as well as in India and America, expect that after the close of the war the Italian button industry will undergo a notable development, and hope even now to extend their export trade, owing to the inability of their strongest competitors to compete successfully at present in the principal foreign markets.

The types which might be successfully introduced into Italy, owing to the fact that the former sources of supply are now closed, are mother-of-pearl and papier-maché buttons, and to a much smaller extent those of celluloid, porcelain, enamel, and glass.

There are no importers of buttons in this district, and but two wholesale dealers, who supply the retail shops and practically all of the tailors in the city. These firms purchase their stocks from traveling salesmen representing manufacturers and importers in the larger commercial centers, and supply the local demand from their deposits. They are jobbers and wholesalers of many other lines and buy on their own account.

NAPLES.

Consul Jay White.

The use of buttons for costumes and also for upholstery is as universal in southern Italy as in the United States. All types and makes of buttons are in requisition, many of which are imported.

Buttons for gloves have up to the present time been largely purchased from Austria-Hungary. Since the beginning of hostilities between the two countries, Italians more than ever are seeking to establish factories where these very necessary articles may be made. Inquiries have been made of this office relative to machinery for such manufactures, as already reported.

The countries which practically controlled the button trade, in so far as imports to Italy were concerned, before the present war were Great Britain, Germany, France, Austria-Hungary, Japan, and Asiatic Turkey, while there were small importations from other countries.

The goods were largely sold from samples mounted on cards, and the means of sale has been by travelers, wholesalers, jobbers, and correspondence.

Italy has long been established as a center for glove manufacture, and here also great quantities of buttons are used. A Naples glove establishment recently placed an order for 9,000 gross of one type of glove buttons.

There is no prejudice against American goods in the Naples consular district. Providing the prices are not above Continental prices, and also that a small margin of credit is allowed, Italian firms would be quite willing to enter into business with manufacturers in the United States. In the past, however, European concerns have been so considerate in their financial dealings with Italians, their aim seeming to be the careful nurturing and fostering of their trade, that the present instant payment policy pursued by American houses has a deterrent effect in establishing connections.

PALERMO.

Consul Samuel H. Shank.

There are no button factories in this consular distict, and the supply of buttons has come from northern Italy, Austria, and Germany. There are no large factories of men's or women's clothing and but three small shoe factories here, so the sales are limited to a large number of tailors, dressmakers, and shoemakers. The annual consumption would probably reach $15,000.

Austrian and German manufacturers have had local agents here, who booked orders which were sent to the factory for execution. These agents, about 10 in number, are the largest buyers here. They receive a commission of from 7 to 10 per cent. German and Italian firms have usually granted credit of from two to six months. Buttons are bought from samples, and the prices for the commoner types range from 13 to 80 cents per gross. Some fancy buttons have sold as high as $7 per gross. Sizes run from 4 to 24 lines. Shipments have usually been made from Austria and Germany by parcels post, in packages of 11 pounds, the cost from Germany being about 40 cents.

Since importation from Austria and Germany has been stopped the supply of buttons is becoming low, and dealers would be glad to receive samples and quotations from American manufacturers. Metal snap fasteners, celluloid, and glass buttons for women's wearing apparel are especially in demand. At present the importers would be willing to pay cash against document, although in ordinary times they demand credit. Prices, if possible, should be quoted c. i. f. Palermo, and correspondence should be in Italian.

VENICE.

Consul B. Harvey Carroll.

Button manufacturing in Italy is well established, has an abundance of expert labor, for which they pay only one-half or one-third the amount in wages that labor of similar quality would cost in the United States. But most of the buttons are made from imported materials, such as vegetable ivory, metal, woolen and cotton cloth, bone, and horn, and there is now a scarcity in all of these materials.

The scarcity in bone is so great that bone buttons are now hardly to be found on the local wholesale market. The value of all other materials has increased. The wholesale selling price has increased approximately 30 per cent as a result of war conditions, and some types of buttons, especially such as were purchased in Austria-Hungary or Germany, are no longer obtainable. Similar articles from Great Britain cost twice as much as from Germany, even before the war.

The great army demands for uniforms have greatly increased the prices of staple buttons of the commoner qualities, while other uses for metals have increased the cost of metal buttons, and difficulties of transportation have increased from 30 to 40 per cent the cost of raw materials imported from abroad. As the celluloid buttons are made from celluloid imported from the United States, American makers of celluloid buttons ought to compete in this market especially. Makers of cloth-covered buttons for men's and women's tailored suits ought also to be able to compete, and such metal buttons as formerly came from Germany and such fancy buttons as formerly came from Austria-Hungary might be supplanted by American buttons.

A staple self-fastening button of the kind once known as bachelor's button is imported from France. It has the advantage over any Italian button of the same sort in that the under piece is perforated so that the button can be again unfastened while the Italian button, once the two pieces are clamped together, remains fixed. Both the French and the Italian buttons of this sort sell (Oct. 4, 1915) at wholesale at 1.50 lire, or $0.29 per gross. America has better makes of such patent buttons and should be able to compete.

In the Veneto the firms and establishments that use foreign buttons buy almost exclusively through local jobbers or wholesalers and Italian made buttons are bought in the same way.

The trade in novelty buttons, emblems, and badges, made of glass, cheap enamel, and metal, has flourished under the stimulus of patriotism and war fever in so far as these articles are made in patriotic designs, national colors, coats of arms, flags, and symbols. Some of those in glass are made in Venice but the greater part are made in Milan and Turin and sell at retail at prices that range from 10 centesimi (2 cents) to 2 lire (40 cents), the average price being 50 centesimi (10 cents).

The duty upon buttons varies according to the material of which the button is made or with which it is covered. Imports from the United States are admitted at the conventional rates of duty, which are as follows:

	Per 100 kilos.*
Papier-mâché	$9.65
Wood or vegetable ivory	9.65
Cotton covered	23.16
Woolen covered	42.46
Linen, flax, or hemp covered	21.23
Porcelain	9.65
Glass	9.65
Enamel	9.65
Silk and silk threads (per kilo or 2.2 pounds)	.965

NETHERLANDS.

ROTTERDAM.

Consul General S. Listoe.

As the production of buttons in the Netherlands is practically nil all buttons are imported, principally from Germany.

The "Steinnuss" varieties of buttons, while very expensive, are much liked for overcoats and mantles, and are imported from Germany, Austria, and Italy; mother-of-pearl buttons, also well liked, come from Austria, Italy, and Turkey; horn buttons for vests and coats are cheaper than "Steinnuss" and are imported from Germany and Italy; linen-covered buttons come from Germany, and the best qualities from England.

According to wholesale dealers in Rotterdam, a demand for American buttons can only be developed by selling high-class novelties for low prices. American manufacturers should also try to meet the requirements of the European trade. The customary terms are three months net, or one month with 2 per cent discount.

Statistics regarding buttons are not compiled in the Netherlands. The wholesale dealers make their purchases from the agent appointed by the foreign manufacturer, or from salesmen sent out by the factory. In both instances the purchases are made from samples. The retail trade and tailoring establishments generally purchase their buttons from the wholesale dealers and importers.

AMSTERDAM.

Consul Frank W. Mahin.

The only buttons manufactured in this district are those of bone, ivory, and buffalo horn, which are used chiefly for outer garments on both men's and women's clothing. Hitherto the supplies have come mostly from Germany, Austria, and Italy, with certain fine qualities from France and also with some imports from England. All these countries being now engaged in the war, supplies are less easily obtained than formerly, and importers are looking elsewhere. But dealers say that qualities must be fully up to those of buttons they have received from the countries now at war, or they can not buy from the United States.

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* 220.4 pounds.

There is said to be now a considerable demand for American press buttons, and it seems evident that a large trade can be acquired in this line by the United States. The introduction of this type of goods should pave the way for the entry of other American buttons.

As a rule, firms using foreign buttons make their purchases through agents and from wholesalers. The wholesalers make their purchases through agents, by samples. The manufacturers send the goods directly to the purchasers' addresses, which are furnished by the agents.

There are no local agencies which carry samples of foreign-made buttons and sell from samples upon their own responsibility for all accounts.

NORWAY.

BERGEN.

Consul R. M. Rasmussen.

The fact that there are no button factories in this consular district or in western Norway should make this an attractive market for buttons, particularly because women's and men's apparel is manufactured here.

Statistics do not give the quantity, value, or type of buttons imported, but investigation discloses the fact that vegetable ivory leads all others in staple buttons, and that bone, metal and paper buttons follow in the order named. The most common types of ivory buttons are the smooth-faced, corrugated, or disked, principally the latter, but fancy buttons, both tinted and inlaid, vary greatly in type.

The button market has been dominated so long by European houses, principally by German and Italian, and in a lesser degree by English and Austrian, that ordinarily it would require tremendous work on the part of American manufacturers to establish a market, but the present European war on the one hand and the newly established direct transportation facilities between Norway and the United States on the other have created conditions most favorable to American trade extension, so that old conservative houses with long-established business connections have been compelled to seek new trade openings and new sources of supply. The opportunity is here, but it will require insight into the needs of the market and systematic handling to take it over and to hold it; commercial travelers must replace the local agent, adequate banking facilities with fair rates of exchange must be provided, and credits instead of cash against documents must be allowed.

The prevailing wholesale prices for buttons imported into this district are as follows (Sept. 25, 1915):

	Price per gross.
Ivory nut:	
Coat, 32 lines	$0.48–$0.71
Vest, 26 lines	.29– .43
Overcoat—	
40 lines	1.43– 1.90
36 lines	.95– 1.19
Bone:	
Trousers—	
27 lines	[a]1.19
22 lines	[a].71

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[a] Per great gross.

	Price per gross.
Metal:	
Cloak—	
28 lines	$1.14
36 lines	1.52
40 lines	1.90
48 lines	2.85
60 lines	3.81
Horn:	
40 lines	1.70
48 lines	2.57
Paper:	
18 lines	[a].31
27 lines	[a].34

The principal Italian, German, and English manufacturers are as a rule represented by general agents for Norway, who make a general canvass of the principal cities. The consular district of Bergen has no agents representing any particular manufacturer, but there are agents here who represent foreign commission houses who in turn represent various manufacturers. The larger dealers and wholesale houses make their purchases from samples either through general agents in Norway, or through the factory direct, and the smaller firms buy from local wholesale houses, or from samples through agents for commission houses. The usual terms are 30 days net, or 2 to 5 per cent off for cash.

STAVANGER.

Consul Maurice P. Dunlap.

Ready-made clothing stores, wholesale and retail dry-goods stores, and tailors are the most important users of buttons in the district of Stavanger, Norway. Bone, mother-of-pearl, xylonite, linen, tin, celluloid, stone, glass, and pressed cardboard are among the materials most commonly used in imported buttons. Metal and cloth-covered varieties are made at Christiania. The sale for fancy buttons is very limited.

In 1914 there were 8,197 pounds of buttons and parts of buttons imported into this district from Germany and 1,003 pounds from England. There were no imports from America. Statistics for other countries and other years are unobtainable under present conditions. A leading men's clothing store imported about $500 worth of buttons this year for its own use, mainly vegetable ivory buttons from Italy. Most of the imported buttons, however, come from England and Germany, mother-of-pearl and cheap bone buttons coming mainly from the former country and celluloid and very cheap pressed cardboard (lacquered) from the latter. No buttons are exported from this district.

There is a good opportunity here at present for the introduction of American buttons, as the supplies from all the usual sources have become more or less uncertain. To reach the market, samples might be forwarded to the leading firms or an agent might be found to cover the territory. As the button consumption of this locality is relatively small, there being only 150,000 people in the district, it would seem better that such an agent should have headquarters in Christiania and work through the whole country from that point. On ordinary buttons and button forms there is a duty per kilo (2.2046 pounds) of $0.32; on buttons covered or spun over, with silk $1.072, with other material $0.536.

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[a] Per great gross.

Ordinarily local agents show samples here and direct importations from abroad are made from these. Sometimes importations are made indirectly through German wholesale houses. Italian, Austrian, and Bohemian buttons come in this way.

PORTUGAL.

LISBON.

Consul General W. L. Lowrie.

Imports of buttons into Portugal during 1913, according to the latest statistics, aggregated $165,751 in value. This may be taken as the extent to which buttons of a high grade are used in the entire country. Inferior qualities are manufactured by eight or nine factories at Oporto in sufficient quantities to supply the local demand for this class of goods. Materials most favored are horn, mother-of-pearl, glass, slate, wood, metal (handled mainly by army and navy tailors), and cloth used for men's clothing.

Imported buttons are of glass, porcelain, colored aluminium (from Austria), and of miscellaneous materials not classified in the tariff schedule and often of unknown composition. France, Germany, and Austria have been the main sources of supply, but now the receipts from these countries are almost nil. Stocks of high-grade buttons are low and manufacturers in the United States should lose no time in getting in touch with the market here.

Under normal conditions foreign button houses doing business in this country have general agents in Lisbon and Oporto who are visited by salesmen at least twice a year. The latter are well equipped with samples of all kinds. Their activities, however, are now practically stopped, and American manufacturers should take advantage of the opportunity.

The following table shows the imports of buttons into Portugal in 1912 and 1913:

Countries.	Glass and porcelain buttons.		Buttons not specified.	
	Quantity.	Value.	Quantity.	Value.
1912.	*Pounds.*		*Pounds.*	
Austria	4,885	$3,245	27,454	$39,020
Belgium			1,179	686
England	595	517	1,047	1,819
France	15,355	5,643	16,640	25,731
Germany	5,809	4,553	31,241	30,091
Italy			1,854	1,594
Japan			1,490	1,243
Other countries	674	198	299	325
Total	27,318	14,156	81,204	100,558
1913.				
Austria	9,370	8,178	39,459	53,091
England	740	701	1,030	1,661
France	14,981	6,405	15,553	28,181
Germany	11,565	11,639	42,736	49,456
Italy	844	605	1,398	1,761
Japan			1,153	1,350
Spain	11	20	1,305	1,898
Switzerland	355	220	403	342
Other countries			300	240
Total	37,866	27,768	103,337	137,980

The total of all kinds of buttons imported into Portugal in 1912 was 108,522 pounds, having a value of $114,714. In 1913 the total imports were 141,223 pounds, with a value of $165,751.

There is no exportation of buttons from Lisbon or Oporto, except a small quantity to Portuguese possessions.

The Portuguese import duty on glass and porcelain buttons is 0.500 milreis per kilo. Buttons not specified, excluding gold, silver, and platinum buttons, pay 1.200 milreis per kilo. (1 milreis, at present rate of exchange equals $0.70½; 1 kilo equals 2.2046 pounds.)

The following are the customary methods of making settlements for goods sold in Portugal: (1) Remittance in dollars on New York after receipt of goods, with 5 per cent discount; (2) remittance on New York 60 days after receipt of goods, with 3 per cent discount; (3) payment against acceptance of draft, net, 90 days after date of invoice. If credit exceeds 90 days after date of invoice, interest is generally charged at the rate of 6 per cent a year.

Firms usually buy direct from the manufacturers through their agents in Lisbon, who are well supplied with samples.

The women's clothing trade in Lisbon is done by tailors exclusively for women and by special firms carrying ready-made garments.

Special conditions which prevail in Portugal at the present time must be taken into consideration by American exporters. Although stocks of buttons on hand are low, buyers are not disposed to purchase large quantities at present owing to the high cost of New York exchange, exorbitant freight and expense charges, and uncertain shipments.

American manufacturers would do well to consider future business and to grant as liberal terms and conditions as possible.

About one-tenth of all the buttons imported into Portugal have been shipped by parcel post. It is a most regrettable fact that our exporters are not able to employ the same method of transportation for shipments to this country.

OPORTO.

Consular Agent W. H. Stuve.

Buttons of horn, corozo, and mother-of-pearl are manufactured to a considerable extent in this district, there being seven or eight factories. It is impossible to obtain any statistics as to the production. There were imports, however, to the amount of 39,151 pounds, valued at $51,318.

The best way to develop a market for American buttons is to follow the example of the German, Austrian, and French houses; that is, to appoint a good agent, supply him with sample collections, and quote prices f. o. b. New York or, better still, c. i. f. Oporto.

The purchases are made in smaller or larger quantities, according to the customer, and the terms granted as a rule vary between three and four months' credit against acceptances.

FUNCHAL, MADEIRA.

Consular Agent John Correia.

All the low-grade buttons used on the island come from Lisbon, and the materials mostly employed are paste, mother-of-pearl, and wood.

As the buttons from continental Portugal are assessed one-sixth the duty of those from foreign countries the latter are not able to compete in price.

Commerce between Madeira and the United States is hampered greatly by lack of steamers.

RUSSIA.

BATUM.

Consul F. Willoughby Smith.

Buttons of all kinds are used in the Caucasus. The most popular types are said to be made of coconut and are imported from Moscow in three sizes, $\frac{1}{2}$, $\frac{3}{4}$, and $\frac{7}{8}$ inch diameter, of flat shape with rounded rim, a depression in the center, and four holes. A black variety is made in seven sizes, from $\frac{1}{2}$ inch to $1\frac{3}{16}$ inches. Manufacturers' prices on January 1, 1914, were from $0.50 to $1.35 per gross f. o. b. railroad station Moscow.

Buttons made of a composition having the appearance of ivory are also very popular. These are mostly of ivory color, but there is also a demand for blue, red, black, and brilliant tints. These buttons are flat, smooth, highly polished, with rounded edges and perforated base, the surface remaining smooth. They are imported in all sizes, the smaller ones, from one-fourth inch to three-fourths inch, being the most popular. The annual trade in these buttons in the Caucasus is estimated at $60,000; in Tiflis at $20,000.

Steel trouser buttons are also in great demand. They were imported exclusively from Poland and are of a somewhat similar type and size to those used in the United States, though the quality is inferior and the button much flatter. They were sold f. o. b. railroad station Warsaw at $1.40 per gross, cash, and at $1.53, six months credit. The shortage in trouser buttons is very great, as the factories in Poland are now occupied by the central powers and the source of supply is cut off. Wholesale prices of Russian buttons have gone up 50 per cent; retail prices 100 per cent.

Foreign buttons were supplied entirely by Austria-Hungary. Almost all these were pearl buttons of the usual flat variety, with two or four holes, either quite flat or with a depression in the center, of various thickness, and in 12 sizes from $\frac{1}{4}$ to 1 inch; prices f. o. b. at Tiflis from $0.88 to $11.01. A small quantity of glass, china, bone, and fancy buttons also were imported from Austria.

Purchases of foreign buttons are made from the manufacturers, through their local agents, on samples shown by the latter. The agent receives the order and transfers it to the factory, which ships the documents to the order of the agent, the latter delivering the goods to the purchaser against his note payable within six months from date of bill of lading. If payment on these notes is made within 60 days the purchaser gets a discount of 2 per cent. The agent's commissions runs from 5 to 10 per cent.

The total annual import of pearl buttons in the Caucasus is estimated at from $90,000 to $100,000, of which Tiflis consumes about $30,000.

Linen buttons are imported from Poland, and there is a great scarcity now. Under normal conditions the United States could not compete in this particular line.

The only way for American manufacturers to compete with Russian or foreign manufacturers is to adapt themselves to the customs above outlined. Local dealers have expressed the desire to see samples of American buttons and have expressed their willingness to depart from the types now on the market, should American samples prove satisfactory. Samples forwarded to the consulate will be exhibited to the parties interested.

The following customs duties are charged on buttons:

Kinds.	Rubles per funt.	Rubles per pound.	Dollars per pound.
Pearl	0.90	0.996	$0.51
Base metal	1.45	1.61	.83
Linen, cotton, wool, and silk	1.45	1.61	.83
Glass, wooden, and all other	.66	.731	.38

The wholesalers' profits on buttons run from 10 to 20 per cent; retailers from 30 to 40 per cent above the original price. Buttons are sold almost exclusively to wholesale and retail dealers in "mercerie."

No buttons are manufactured in the Caucasus.

RIGA.

Consul Douglas Jenkins.

Buttons are extensively used in the Riga consular district, and before the war the supply came almost exclusively from Germany and Austria. Buffalo horn and trimmed and linen-covered buttons are in most general demand, but there is also a market here for ordinary horn, jet, glass, mother-of-pearl, and "Steinnuss" buttons.

Some English and French buttons have been imported in the past, but dealers here say that the output from these countries does not generally meet the demands of this market. One of the larger importers in Riga informed this consulate that he is now anxious to establish connections in the United States. This house does business not only in the Riga district but generally throughout Russia.

No buttons are manufactured in this district, but there are some imports from Moscow and Lodz factories; these, however, supply only ivory (Steinnuss) and horn buttons.

Owing to the military situation at present it is difficult to form an idea of the needs of this market. Most of the more important dealers are away from the city and stocks in hand are so depleted that no satisfactory collection of samples is to be had.

Dealers who still remain in the city say, however, that they are finding it very hard to supply their customers with buttons, in spite of the fact that the population of the city is only about one-half of what it is in normal times and the purchasing power of the remaining people is greatly reduced. It is evident that an effort will be made to obtain supplies from the United States in future.

German and Austrian manufacturers sent their traveling salesmen to Riga two or three times each year and samples were received at frequent intervals. Some of the firms purchased on 30 days' cash, but others are accustomed to longer terms of credit.

The button business is not highly developed in Riga. There are a number of wholesale dealers who import direct and sell to the smaller dealers and users of buttons. There are also retailers who import for their own use, including certain dry goods houses and tailoring establishments. Agents are few. They sometimes assume responsibility for accounts and at other times do not, depending on the contract made with the manufacturer.

Business houses will correspond in either Russian or German, the former preferred at present. But few of them understand English.

FINLAND.

Vice Consul Felix Cole, Petrograd.

The general use of buttons on clothing in Finland does not materially differ from their use in other parts of Europe, since European clothing is worn by the majority of the inhabitants, and national costumes are rare. By far the most buttons used are either bone or horn, the classification of shell buttons not appearing at all in the official statistics.

The local manufacturers of buttons are insignificant, two or three factories existing but doing a very limited business. The majority of the buttons used are imported from Germany, which country leads in button imports of all sorts, but most markedly in bone and horn buttons. Russia's exports of metal buttons to Finland, however, amount to but little less than Germany's.

In general, the better class of buttons are imported from France, especially the cloth buttons so much used on women's coats and dresses and suits and on men's evening wear, although even in this field Germany holds the lead as to sheer bulk of the goods imported.

The following table gives the quantity, in pounds, of various kinds of buttons imported into Finland, as well as the countries of origin, during the first seven months of 1913 and 1914 and for the entire 12 months of both years:

	January-July.		January-December.	
	1913	1914	1913	1914
Bone and horn:	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Denmark	12,250	7,911	22,279	9,519
Germany	26,180	27,623	49,786	30,243
Russia	9,504	8,382	17,202	11,084
Other countries	1,143	2,724	1,965	4,372
Total	49,077	46,640	91,232	55,218
Metal:				
Denmark	2,097	698	4,433	1,951
Germany	8,355	5,841	13,048	6,461
Russia	5,878	9,053	11,447	11,902
Other countries	302	1,586	704	945
Total	16,632	17,178	29,632	21,259
Cloth:				
Germany	4,156	3,144	6,769	4,734
Other countries	2,154	2,039	4,009	3,296
Total	6,310	5,183	10,778	8,030
Grand total	72,019	69,001	131,642	84,507

The German, Russian, and Danish merchants who are now in possession of the field are all equipped with through and direct shipping facilities, have a perfect knowledge of the needs of the market and the idiosyncrasies and habits of Finnish buyers. The majority of purchases are by indirect importation through local jobbers and wholesalers maintaining stocks, very often obtained on commission from the manufacturer. Many German houses have agents who work on small salary plus percentage and who merely transmit the order as received.

While the customary trade terms in Finland are not on such long credits as in Russia, sellers must be ready to grant credit whenever asked by a worthy firm, and more than half the business, especially at first, would have to be done on this basis. The German houses generally collect, if the goods have been sold through a mere agent working on salary and percentage, by drafts drawn by the manufacturer on the customer and discounted through the manufacturer's bank. Manufacturers often collect also, in this same way, through their own bank by means of sight drafts drawn at intervals, from wholesalers and jobbers who buy on their own account. The forwarding of shipping documents against payment by the consignee is less practiced.

ODESSA.

Consul John A. Ray.

The button industry in Russia is of recent date. Less than 10 years ago this country made no buttons of its own, and at the present time none are manufactured here except the cheaper kinds made from coconuts. These the Russian manufacturers have been able to produce at prices which, before the war, shut out foreign competition in these goods. The more expensive buttons, made of mother-of-pearl and of agate, were imported from Germany, Austria, and France. At the present time these sources of supply are practically cut off, but a few buttons of the better grades are still being secured from France by parcel post.

There is a great shortage of buttons in Russia now, especially of buttons of the better grades. The Russian factories were for the most part located in Poland, which is now in the hands of the Germans, and the one remaining button factory, located at Moscow, is entirely unable to supply the whole button market of Russia. The demand for the cheaper grades has been partly met by Japanese manufacturers, who are sending into Russia in large quantities buttons of a peculiar composition, unknown here in Russia, which combines lightness and great strength. These buttons are not, however, in demand by first-class tailors, who try to secure better styles from French firms.

The Russian merchants usually buy their imported buttons through local agents. These agents accommodate them by supplying small quantities and all the varieties desired. The terms of credit are very lenient, being as a rule from five to six months. Thirty days is considered cash, and a discount of 5 per cent is allowed for payments within that period of time.

The commission allowed by foreign manufacturers to their agents is usually 5 per cent on the turnover made. On the more popular articles the commission is less and is sometimes as low as 2½ per cent.

There are no statistics on the button trade in this consular district, but the firm of Theodor Ginzburg, agents for buttons, located at Odessa, informed the writer that during 1915 they sold over $100,000 worth.

SPAIN.

Spain has a very considerable button industry and some export trade. Comparatively, however, buttons of Spanish make have not hitherto been an important factor in foreign markets, although the shortage of the world's supply on account of the war has stimulated the Spanish button industry as well as that of the larger producing countries not involved in the war. The latest available figures indicate that Spain imports nearly a third of her domestic requirements in buttons.

BARCELONA.

Consul General Carl Bailey Hurst.

The standard types of buttons most used in Spain are bone buttons and imitation mother-of-pearl buttons, which, owing to their cheapness, are demanded in great quantities. Real mother-of-pearl buttons and metal buttons are also used to a great extent, the latter having increased in favor within recent years. Novelty buttons of all kinds have found a good market in Spain. Dealers and importers state that metal buttons of brass and steel will be much in demand during the coming season for ladies' dresses and coats. Fine Irish crochet buttons are used on wash goods, horn buttons on various garments, and metal buttons with embossed designs on uniforms. Celluloid, china, porcelain, bone, and composition are used for collar buttons and wristband buttons, while shoe and gaiter buttons are chiefly made of papier-mâché, board, or pulp. Most of the trouser buttons are of metal or gutta-percha.

The mother-of-pearl buttons known here as "Vienes" and "Japanese" are the types most largely imported and there is a constant market for them, while the greater part of the novelty buttons are also of foreign origin. The types manufactured locally are bone, imitation mother-of-pearl, horn, glass, metal, and vegetable ivory buttons. Of the Spanish samples collected, the real mother-of-pearl buttons are made in Valencia, imitation mother-of-pearl in Cardedeu, vegetable ivory in Gerona, and the remaining types in Barcelona.

Official information shows that there are 24 button factories in Spain producing buttons not metal. Those producing metal buttons are classed with factories for designs, devices, and patterns of stamped metal. Of those factories there are 85. Of the factories producing buttons not metal, 18 are devoted exclusively to the manufacture of imitation mother-of-pearl buttons, 1 produces only vegetable ivory buttons, and the remaining 5 manufacture buttons of all kinds, including bone buttons. More than half of these factories are located in the Barcelona district, but only a few are of importance, many being in reality only small workshops. There is also a considerable house industry of this line, the buttons thus produced being sold directly by the maker to the retail dealer. A conservative estimate of the domestic production of buttons is that it supplies about 70 per cent of the consumption in Spain and a considerable quantity is exported.

The imports of buttons into Spain in 1912 amounted to 287,830 pounds, worth $283,701; in 1913, 317,581 pounds, worth $316,240; and in 1914, 237,048 pounds, worth $226,882. Germany, France, Japan, and Austria were the chief sources of supply in 1912 and 1913, the United States furnishing but a small proportion. Official figures as to the countries of origin for 1914 are not yet available, but the imports for that year are classified as follows:

Classification.	Quantity.	Value.
	Pounds.	
Buttons and studs and links of horn, vegetable ivory, bone, ivory, mother-of-pearl, composition, porcelain, or glass	151,275	$134,009
Buttons of metal other than gold or silver	78,866	83,709
Other buttons and studs whether combined with trimmings or not	6,907	9,164
Total	237,048	226,882

For the first six months of 1915 the quantity imported was 119,870 pounds, with a value of $114,268.

Spanish exports of buttons amounted to 84,668 pounds, valued at $82,955, in 1912; 153,241 pounds, worth $150,139, in 1913. There was a decline in 1914 to 76,487 pounds, with a value of $74,939, but the first six months of 1915 indicated a return to the previous volume of business, being 85,345 pounds, worth $83,618.

The nature of the competition to be met by American manufacturers of buttons in the Spanish market is merely a matter of price and terms of sale. There is every possibility of developing a considerable trade if the American manufacturer can sell the same qualities that are now imported from other countries at similar figures and terms. There is a great field for competition in the two classes of buttons already referred to, namely, "Vienes" and "Japanese." As the name suggests, the "Vienes" are of Austrian origin, but are manufactured also in France, Germany, England, and other countries. These, with the "Japanese" buttons, form the great bulk of the button imports into Spain. A merchant whose firm is devoted exclusively to this business states that he imports annually from $70,000 to $80,000 worth of "Japanese" buttons for the Spanish market. One of the button jobbers, wholesalers and importers, mentioned in the appended list of names and addresses, has a house in New York that buys miscellaneous goods of American manufacture for export, chiefly to the Philippine Islands. This American branch of the business has not handled American buttons to any extent and might be interested in them.

It is also worthy of mention that there is a good market in Spain for snap fasteners. Most of these goods used here have been imported from Austria and formerly sold at 40 cents, 60 cents, and 80 cents per gross. Since the outbreak of the war the price has risen to $2.50 per gross. There is only one factory for the manufacture of snap fasteners in all Spain, and its output can not meet the present demand.

Stocks of novelty buttons now on hand are being rapidly exhausted, and merchants state that there is no prospect of their being replenished.

In general, firms that use foreign buttons make their purchases through traveling salesmen, from samples shown by local agents, or by indirect importation through local button jobbers or wholesalers. European button manufacturers or wholesale dealers usually send commercial travelers to Spain twice a year. These bring samples and often leave a sample list with the purchasers for future reference. In other instances, a local agent is named in one or more of the larger cities of Spain who sells buttons through samples shown, the manufacturer assuming the responsibility of accounts. Such agents visit the dealers, submitting the samples and prices. The purchaser signs an order for such merchandise as he may desire, which the agent transmits to the manufacturer, together with business references as to the financial standing of the prospective customer, furnished by some mercantile agency or local bank known to the manufacturer. The goods ordered are then sent direct to the purchaser, he being granted three or four months' credit. The bills are sent to the agent, who presents them to the purchaser and notes any claim which may be made against the manufacturer by the purchaser in regard to the quality of the buttons delivered. Owing to fluctuations of exchange, the purchaser may make payment in advance, should this be to his advantage. At the expiration of the term of credit granted, if payment has not been made, the purchaser is drawn upon for the amount of his bill.

These means are adapted only to purchases made of European houses, where the facilities for sending goods by parcel post enable the purchaser to receive the buttons ordered in a few days. On the other hand, the firms which monopolize the Spanish trade in "Japanese" buttons, selling to the jobbers and wholesalers, buy on their own account. They have a branch house in Japan so that they deal entirely within their own organization, carrying large stocks on account of the time required to import the merchandise from so great a distance. These firms also grant credit of from three to four months.

The principal users of buttons in Spain are those engaged in the various branches of the clothing business, and the bulk of the trade seems to be with the large stores having departments for ready-made clothing, underwear, and men's and women's tailoring. Such stores generally make their own ready-made garments, buying the buttons at wholesale, and also they frequently have departments for made-to-order goods. Other button users on a large scale are the women's and men's tailors.

MADRID.

Consul Robertson Honey.

The American button is not well known in this district, but it has been introduced during the past year by a Madrid house, which has placed two orders recently. The sample book is good, and jobbers and others have inspected it. The prices are from 25 to 30 per cent higher than the corresponding prices on buttons from Germany; but the American button is better looking, is better finished, and the purchasers estimate that the increased price will be made up for by the style and the probable longer life of the button.

Obstacles to the introduction of the American button are to be found in the fact that the American exporters in general do not use the measure of the metric system in describing their products; and also that their catalogues are not printed in Spanish, and, in some instances, do not even quote the prices and the discounts, but state "prices on request." The correspondence is rarely carried on in Spanish, although the Spanish merchant, as a rule, is not familiar with the English language. It is realized, however, that these comments may not apply to the button industry, as this consulate is not in possession of any American literature upon the subject. The high price of the American button is another obstacle in the way of introducing it. As this consulate has heretofore reported—in its opinion, speaking generally—the second-grade button will find a readier market in this district than the first-grade button.

The insistence of the American exporters upon cash as against documents is still another obstacle. For years past the Madrid merchant has been accustomed to 90 days, and he will not trade on any other basis unless forced to do so by circumstances. It is believed that no permanent trade relations will result between the Madrid importers and those American export houses which have forced the terms of cash as against documents, and intending entrants into the Madrid markets should consider this feature of the desired trade before all others. In some instances that have come to the attention of the consulate, the feeling against the American exporters on this ground has been marked. Some of the larger dealers pay cash on delivery, but they very seldom pay before that.

Dealers using foreign buttons make their purchases through the local permanent agent, selected by the export house to represent it. The agent sells from his sample book, and his responsibility in connection with a transaction ceases as soon as he has mailed the order accompanied by the purchaser's draft accepted at 90 days. In other words, the local agent assumes no financial liability and contracts with his principal only to use his business sense as to the standing of the purchaser. The American method of requiring the agent to pay for a shipment out of his own pocket is not in favor here.

The estimated population of Madrid is 625,000. The city is the capital of Spain, and the clothing worn and buttons used are those appropriate in a European capital; the estimated population of the district is about 3,000,000, of whom a considerable number belong to the peasant class, among which the demand for buttons is small.

For women's wear 3/4/5 lines are the sizes in general use for dresses and 10/12/14 lines for overcoats. Jet and celluloid are the prevailing types for overcoats, and for dresses crystal, fancy, and wood, or metal covered with cloth. For men's wear the prevailing types are celluloid and composition; 32/40 lines for coats and overcoats and 22/23 lines for waistcoats. On women's white costumes the buttons are usually of mother-of-pearl or crystal.

There are two factories in the district—one owned by Sr. D. Lucas Saenz, Calle de Espartero, 1, Madrid, and the other owned by Diez y Cia., Calle de Preciados, 10, Madrid. The buttons manufactured are of white metal and brass of cheap grade for use on uniforms of servants, employees of the Government, of corporations, and of schools.

MALAGA.

Consul Percival Gassett.

The greatest need at present in Andalusia certainly, and it is said in the whole of Spain, is for metal clasp buttons (botones de presión) for women's dresses. Probably from $60,000 to $100,000 worth of these could be sold now in the Malaga district alone.

After pressure or clasp buttons the next principal demand here is for fancy buttons of glass, celluloid, composition (botones de pasta), and bone or vegetable ivory (botones de coco).

There is also a considerable demand for pearl buttons; none can be obtained from Austria now, and those imported from Japan are of inferior finish, very rough at the back. They cost, though, about 40 per cent less than the best pearl button made in Vienna.

SEVILLE.

Consul Wilbur T. Gracey.

No data are available as to the quantity of buttons imported into Seville, as in the customhouses they are classified under general headings, and the only information that can be secured is that given by one dealer, who estimates the annual value of the imports at Seville to be about 3,000,000 pesetas ($579,000) in the past four years. Another dealer estimates that the annual importation of buttons for women's clothing approximates 200,000 francs ($38,600). Approximately one-half of the quantity arriving at Seville is reshipped or sold to other places in the district.

There appears to be a good opportunity for the introduction of American buttons at the present time, as the usual sources of origin are now closed to the Spanish market by war conditions in Europe, and button dealers are looking toward other countries for their supplies. In normal times the imports from Germany and also from Austria are large, but at present these countries can not supply Spanish merchants, who in consequence have turned to French and Italian manufacturers. This business is also restricted by the fact that the French and Italian firms are not now manufacturing normal quantities.

Various types of buttons are found on the Seville market, the flat plain types with and without holes, for men's garments, and numerous kinds, both plain and fancy, for women. Jet buttons are very largely in demand, being used almost exclusively for mourning dresses of women. As the periods of mourning are longer in Spain than in America, and all women and girls dress exclusively in black after the death of parents or brothers and sisters, an unusual demand is created for black buttons, which must be taken into consideration when supplying Spanish trade.

No buttons are manufactured in the Seville district except cloth ones, which are made as needed by the tailors or dressmakers from cloth of the same kind as the suits to which they are attached. The forms upon which these buttons are made are all imported either from other Spanish cities or from abroad.

Buttons and forms are imported from Austria, Germany, and France, and sometimes from Italy. They come direct to dealers in Seville, who sell them locally, and supply the surrounding cities and towns. The plainer sorts, such as used for men's clothing, etc., mostly of bone or composition, come to Seville from the factories in the north of Spain, most of which are situated in Barcelona. Pearl buttons originate in Japan and reach Seville through established agencies in Barcelona.

Importation is usually made on the basis of samples taken to Seville by traveling salesmen of the foreign firms or from samples in the hands of Seville commission agents.

The usual terms given on this class of goods are 30 days, with 3 per cent discount, or three or four months' credit, with net prices. German firms have customarily extended credits to periods of six months or over. Drafts are usually accepted upon receipt of the merchandise.

Quotations on buttons should be made for the Seville market in pesetas or francs. By quoting in gold pesetas comparisons can be made with the prices quoted by French and other European firms, and trade is more likely to result than if the quotations are in United States currency, with which Spanish merchants are not familiar. Quotations should always be made f. o. b. American port of shipment, if c. i. f. Spanish port prices can not be given. Local agents here, as well as traveling salesmen for European firms, quote prices in Spanish currency, c. i. f. Spanish port, and thereby gain an advantage over American firms, whose quotations are made in currency with which the local merchants are unfamiliar.

Consul W. Roderick Dorsey, of Tripoli, in COMMERCE REPORTS for September 17 describes a method of circulating samples used with success by German representatives in his part of the world, and this scheme would appear to be a good one in the case of the button trade at Seville. The manufacturer sends to local agents at intervals sample cases fully stocked with specimens numbered to correspond with quotations in the company's price list. These the agent uses in booking orders, keeping them as long as necessary to canvass his clients without unduly delaying them, and then forwards them at the manufacturer's expense to another agent in a near-by city. Undoubtedly this is an easier way to sell than by catalogue, and might well be tried by persons wishing to engage in the button trade in Spain.

Buttons received here are usually sewed on cards and packed in cardboard cartons.

CANARY ISLANDS.

Consul George K. Stiles, Teneriffe.

There are no manufactures of buttons of any sort in the Canary Islands, and the absence of any clothing industry on an extended scale makes this market relatively unimportant. Nevertheless, this market, such as it is, has lost its former source of supplies.

The paramount question involved is whether American firms will secure this business direct or sell indirectly through British middlemen in Liverpool. In both cases American factories must supply the merchandise, but if sold through Liverpool the profits of the middlemen will make the final prices in these islands very high.

This means close ordering and an instant loss of the market the moment the war ends, when Spanish and Italian jobbers will be able once more to obtain the Austrian and German made buttons, which heretofore have furnished the entire supply. Prior to the war Spanish jobbers stocked heavily in anticipation of a loss of supplies, but at this date these stocks are reported as being recently exhausted. Thus the market is already looking toward the United States for its button supplies; but to acquire a permanent hold on the buyers direct selling is essential.

The best means of selling this market, both as regards profits and permanency, is through agency representation; nor will this be difficult, if gone after in the same manner as German and Austrian factories previously employed. There are two principal button importers in Teneriffe, both of whom are in a position to act as agents for American button exporters.

Between them, these two merchants annually sell two-thirds of this market, buying each about $2,000 per annum. The total amount imported in Teneriffe is estimated at $6,000, while in Las Palmas, Grand Canary, a similar amount is required annually.

Credits at this time need not be extensive, as the former long-time credits from Austrian and German factories have been shut off until the cessation of war opens up communication. The middlemen in Liverpool, however, invariably resell American merchandise in these islands at a substantial increase in prices, giving also several months' credit, which is greatly appreciated here.

Cash against documents in Canary Island ports will be acceptable to buyers here, while f. o. b. prices, New York, will certainly mean the closest kind of buying and the smallest possible amount of stocks carried. Once war conditions are removed, long-time credits and small profits would be needed.

Prices range from $0.24 per gross to $16 per gross, the higher prices being for fancy buttons, of which the quantities bought are unimportant.

Bone and mother-of-pearl (shell) buttons are those principally required here. The ordinary pressed-metal buttons for overalls are also extensively employed.

SWEDEN.

GOTEBORG.

Consul Emil Sauer.

Only uniform buttons of brass or nickel and cheap iron and lead buttons are manufactured in Sweden, all other kinds being imported. The uniform buttons made here include yellow "anchor buttons," much used for boys' clothing. There are only four button factories in Sweden—two in Stockholm, one in Malmo, and one in Askersund. The statistics of manufacture for 1913 do not specify separately the production of buttons, but for the years 1911 and 1912 the value of their output was $173,130 and $177,321, respectively. About $6,523 worth were exported, chiefly to Denmark. The greatest demand in Sweden is for ivory buttons and pearl buttons for men's and women's underwear and men's shirts.

The imports of buttons of different kinds for the years 1911, 1912, and 1913, the last years for which official statistics are available, amounted to 253,265 pounds, 417,632 pounds, and 542,866 pounds, respectively. The value of the imports is shown in the following table:

Kinds.	1911	1912	1913
Bone or horn	$9,714	$10,791	$13,442
Mother-of-pearl	....	53,309	59,675
Ivory nut	50,469	73,494	108,506
Papier-mâché	....	754	1,492
Glass or porcelain	....	6,825	10,029
Iron, also parts of buttons	....	6,538	6,750
Not specially mentioned, other than buttons solely of iron:			
Gilt or silvered	....	6,929	14,141
Other kinds—			
Solely of one metal	....	9,867	11,579
Other	....	8,214	8,818
Not specially mentioned, of materials not specified:			
Covered with textile material mixed with silk	16,340	16,976	16,670
Covered with other textile material	14,381	17,554	16,727
Composed of two or several substances	....	25,263	36,845
Other kinds	32,519	1,236	8,470
Total	123,423	237,750	313,144

Almost 65 per cent of the imports of buttons came from Germany. Of pearl buttons, $7,122 worth came from Austria, included in " other countries "; of ivory buttons, $23,598 worth came from Italy; and of buttons covered with textile material other than silk, $5,516 worth came from Great Britain. The present is a very favorable opportunity for the sale of American buttons.

As a rule the retailers of Goteborg do not buy from the manufacturers, whether domestic or foreign, but from the wholesalers, who in turn buy from the manufacturers. The wholesalers and jobbers buy from foreign manufacturers and foreign wholesalers on their own account and responsibility. The large tailors of Goteborg import direct from foreign wholesalers, but not from manufacturers, while the small tailors buy from Swedish wholesale houses and jobbers. The purchases direct from abroad are mainly from samples sent over here or exhibited by foreign traveling salesmen. Many purchases also are made from samples shown by local agents.

A representative of one American button manufacturing company has just canvassed the market here for pearl buttons and has made very good sales. He made special efforts to sell to underwear and shirt factories direct and to sell buttons not sewed on cards. As this firm maintains an office in London it is apparently attempting to maintain permanent connections in Sweden.

With reference to prices, time of delivery, time of credit, patterns, and sales organization, the American manufacturers or exporters would have to compete chiefly with the German. Representation by local agents provided with samples, or direct connections with well-established wholesale importers or jobbers, might both be effective. To keep American buttons in stock at a commercial center in Europe, from which the goods could be delivered on short notice, might also prove useful if it is made plain to the customers that they can obtain the buttons from such place on the same favorable terms and at the same price as direct from America. The local agent or sole importer could also be provided with attractive show cards or signs, giving the manufacturers and agent's name and address, etc., to be distributed to users of and retail dealers in buttons.

The customary terms are stated to be from three to six months' credit for firms who are classified under Nos. 1, 2, and 3 in the lists of the Merchants' Association.

In Goteborg and Malmo the wholesalers, the agents, and the dry-goods stores and dealers in haberdashery undoubtedly sell the largest quantities of buttons. There are a number of smaller retail dry-goods stores who purchase from the wholesale houses. There are no wholesale firms handling buttons only, but various firms carry a general line of dry goods, haberdashery, dress trimmings, etc. They and the larger tailors buy usually direct from abroad on their own account as above stated. The agents referred to represent foreign manufacturers and sell from samples for direct shipment by the manufacturer, without assuming the responsibility for the account. By special arrangements and some extra compensation they might, however, be willing to assume responsibility for proper payments.

STOCKHOLM.

Consul General Ernest L. Harris.

All types and varieties of buttons are found in the markets here, most of them imported, as the output of Swedish button factories is not large. The terms of the button trade in Sweden are three months' credit, or 30 days with 2 per cent discount.

Wholesale dealers and importers say that American buttons are twice as high in price as those made in Germany. It is stated that one firm in Berlin keeps an immense supply of all the various kinds of buttons in the world and is practically in position to deliver to Sweden immediately upon receipt of an order. This applies to both large and small orders. As far as Sweden is concerned the German sales are usually contracted for by samples, and it is estimated that Germany supplies Sweden with fully 80 per cent of the buttons needed. Swedish buyers are also of the opinion that Germany can supply the Swedish market just as rapidly now as before the war began.

SWITZERLAND.

Consul General Francis B. Keene, Zurich.

With the exception of metal buttons, which are principally used for the Swiss military uniforms, no buttons are manufactured in this country. Consequently there is a large demand for all kinds, but in spite of a very thorough effort to investigate it was impossible to secure even approximate estimates of the annual total consumption in Switzerland.

Vegetable ivory (Steinnuss) is the chief material in the buttons sold here, but only the better class of buttons for men's clothing are made of vegetable ivory, the cheaper grades being of metal and some of buffalo horn; the use of the last named is, however, rather unusual. For a medium-sized coat button the prices (Oct. 18, 1915) vary from $1.46 to $1.99 per gross, and for a vegetable ivory trousers button from 50 cents to 58 cents per gross. The metal button, however, which is used on trousers exclusively, is considerably cheaper, the prices varying from 11 cents to 29 cents per gross. These are the prices at which buttons are sold to retail dealers, tailors, department stores, etc.

The better qualities of fancy buttons are made of galalith, yet celluloid is still extensively used, as are also glass, cloth, horn, wood, etc., these latter for the lower-grade buttons. For the button industry, galalith is still a new product. Although it was discovered about 10 to 15 years ago, the first successful use for buttons was made some four or five years ago.

Besides galalith, celluloid is still used to a certain extent for fancy buttons, being cheap and, although less durable, having otherwise the same qualities as galalith. Cloth, glass, metal, and horn buttons are also in use, though more as trimmings on ladies' garments.

The retail prices for fancy buttons vary from 4½ cents to 23 cents apiece for galalith and from 2 cents to 4½ cents for celluloid (Oct. 18, 1915).

This office has consulted a few of the most prominent wholesale dealers in this city, but they all seem to be rather pessimistic as to the possibility of developing a demand for American buttons in Switzerland. European manufacturers offer a very keen competition, and their long experience with Swiss importers, as well as their knowledge of the requirements, customs, terms, etc., are naturally much to their advantage. They are very apt in producing an article that meets in every respect the approval of the buyers, and the quality, style, finish, and price of the goods offered seem to give full satisfaction. The price especially should be seriously considered by American button manufacturers. A large dealer in Zurich, who was consulted on this particular point and who has been dealing in buttons for over 40 years, is of the opinion that, as regards prices, the American buttons can not compete with those produced in Germany, Italy, and Austria. Not only that these countries, owing to cheap labor, have a lower cost of production, but the better shipping facilities and less expensive freight rates enable them to make close calculations which would hardly leave a profit to American manufacturers. It is also stated that the time of delivery required for transmarine shipments would greatly interfere with the business here, especially in fancy buttons, of which large stocks can be kept only in the qualities chiefly in demand at the time, other kinds being sold from samples and ordered direct from the factories. It would seem advisable, however, to submit samples to Swiss importers and wholesale dealers with lowest prices for delivery to Switzerland or c. i. f. some European port. This would give an opportunity to look them over, get expert opinions from prospective buyers, compare them with the European makes, and ascertain whether the article would warrant the spending of time and money in introducing it on the Swiss market.

There are a few wholesale button dealers in this city who buy direct from the manufacturer. These firms have staffs of experienced traveling salesmen, who solicit the trade all over the country, visiting chiefly retail shops, tailors, dressmakers, department stores, etc. Besides these, numerous manufacturers cater direct to the trade, doing away entirely with the middlemen, whereas still others have their agents or representatives who handle on the side also similar goods in the same line, such as trimmings, linings, and other tailors' and dressmakers' supplies. The customary terms in Switzerland in this line are cash with 2 per cent and 1 per cent extra; 30 days, 2 per cent discount; or 90 days net. The goods are delivered prepaid and duty free at destination. The Swiss duty on all kinds of buttons is $5.79 per 100 kilos (220 pounds).

Apparently the prevailing conditions in Europe have in no way influenced the button market in Switzerland. Large and small orders have been filled as usual without delay, and the shipping and export formalities for this class of merchandise have remained unchanged in all of the belligerent countries. In spite of the suspension of the manufacture of galalith, for which the principal component, casein, is no longer obtainable, there is said to exist such an exceptionally large stock of the finished product galalith that it could even be exported in any desired quantity to the United States.

UNITED KINGDOM.

Consul General Robert P. Skinner, London.

Nearly every known variety of buttons is popular in England with its own class of trade. Men's suits, including coat, vest, and trousers, are usually trimmed with vegetable-ivory buttons. On overcoats which are made for sporting purposes large horn buttons are often used, and tweed suits or jackets sometimes have leather or galalith buttons. The cutaway morning coats which have long been popular in England are more often trimmed with silk-covered buttons than with ivory buttons. Since the beginning of the war, however, the morning coat has been much less worn than in ordinary times. Nearly all the khaki uniforms supplied to soldiers are trimmed with metal buttons made in Birmingham, though imitation-horn buttons manufactured from vegetable ivory are sewed on to the gaiters which are supplied to certain regiments.

On women's clothes, celluloid, vegetable-ivory, and cloth-covered buttons are used. Women's street suits have either vegetable-ivory buttons or metal buttons covered with the same material as the garment. Cloaks are usually trimmed with fancy celluloid or celluloid and enamel buttons, of which there is a great variety. Underclothing, men's shirts, and women's blouses are usually made up with pearl buttons, though the latter are also trimmed with celluloid fancy buttons. Some grades of underwear have stiff cloth buttons. Many of the pearl buttons used are now imported from the United States, though before the war Austrian merchants purchased shells at the Mincing Lane market (London) and sent them to Vienna to be manufactured and reexported to England. The buttons commonly uesd on women's cloaks are often so large that it is impracticable to use vegetable ivory, the nuts being small.

Every type of button is imported, the manufacturers of Great Britain not being able to supply the trade. Most of the metal buttons and molds are made in England.

The imports of "buttons and studs (not of metal)" from foreign and colonial sources were as follows:

Countries.	1911	1912	1913	1914
	Gross.	*Gross.*	*Gross.*	*Gross.*
Austria-Hungary	619,228	571,258	432,209	227,502
Belgium	264,394	330,221	289,639	139,416
France	886,939	1,170,198	1,514,414	942,873
Germany	2,209,645	3,512,109	3,856,815	2,231,674
Italy	2,375,264	2,424,864	2,918,704	1,682,691
Japan (including Formosa and Japanese leased territory in China)	1,389,481	939,538	1,801,279	1,092,127
Switzerland	209,294	335,320	459,038	216,568
United States	872,323	1,159,034	1,650,365	1,616,433
Other foreign countries	15,902	20,860	7,826	63,416
Total from foreign countries	8,842,470	10,463,402	12,930,289	8,212,700
Total from British possessions				2,250
Total	8,842,470	10,463,402	12,930,289	8,214,950

Statistics showing the exports of buttons manufactured in this country are not available. In the following table, however, are given the reexports of "buttons and studs (not of metal)" imported from foreign and colonial sources:

Countries.	1911	1912	1913	1914
	Gross.	*Gross.*	*Gross.*	*Gross.*
Belgium	14,593	25,050	24,686	14,915
Denmark (including Faroe Islands)	5,276	3,968	21,570	12,480
France	10,544	22,713	10,567	3,691
Germany	65,246	75,965	147,133	80,896
Italy	18,499	29,202	79,818	23,510
United States	20,695	42,775	38,081	14,521
Other foreign countries	39,251	44,127	77,992	57,726
Total to foreign countries	174,104	243,800	399,847	207,729
Australia:				
New South Wales	97,251	132,831	143,607	138,873
Queensland	39,070	55,147	32,299	34,458
Victoria	64,511	108,956	155,560	126,619
Other colonies	48,169	50,075	65,326	44,386
Canada	106,001	149,123	249,710	183,869
New Zealand	93,530	114,859	117,022	72,599
Union of South Africa	56,167	90,868	102,547	101,252
Other British possessions	39,333	54,018	34,535	28,378
Total to British possessions	543,032	755,877	900,606	730,434
Total	717,136	999,677	1,300,453	938,163

As the trade in men's ready-made clothing in England is comparatively small, when it is considered how many ready-made suits are sold in the United States, it may be seen that men's tailors in Great Britain do a much larger trade in buttons, relatively, than tailors in America. With regard to women's garments, it is thought that the proportion would be about the same as in the United States, because a great many ready-made women's garments are sold in this country. Men nearly always have their suits made to order, the prices being very low.

American manufacturers should be able to enter this market and gain a good share of the trade. In the course of obtaining information for this report, about six button importers and jobbers were interviewed and it was found that each one of them had American buttons in stock and was importing directly or indirectly from the United States. As German and Austrian houses no longer supply this market, competition is not as keen as in ordinary times, and French and Italian manufacturers are not sending their usual quota. In the latter countries there is a shortage of labor and button makers are experiencing difficulty in obtaining supplies of raw material on account of freights, etc. At the moment, American manufacturers must meet the competition of British, French, Italian, and Japanese firms; Switzerland and other foreign countries also send small quantities.

A prominent button importer stated that the reason foreign firms succeeded so well in placing their goods on this market was that they usually specialized in buttons and were able to give greater attention to their trade than some British manufacturers who made buttons only in connection with other trimmings and specialties of various descriptions.

England makes comparatively few vegetable ivory buttons.

Firms that use foreign buttons sometimes make their purchases by importing direct, but more often by ordering through or purchasing from local jobbers and wholesalers and by ordering from local agents who carry samples only. Importers who buy regularly from abroad usually demand terms of 2½ per cent monthly (leaving a clear 30 days) or 3¾ per cent for spot cash.

BIRMINGHAM.

Consul Samuel M. Taylor.

Birmingham is the largest button-manufacturing center in the United Kingdom. There are about 20 firms engaged in the exclusive manufacture of buttons, and at the present time the production is enormous, largely because of military requirements. Figures are not available as to the annual output, but 9,000,000 gross is a safe estimate. The local manufacturers have been greatly benefited by the war in that it has stopped the German and Austrian exports to the United Kingdom, which for some years past have had a value of $10,000,000 to $15,000,000. At the present time the Birmingham makers are being flooded with orders.

A sufficient supply of material has not always been available for the Birmingham makers. Since 1865 the supply of pearl shell has been obtained from Australia, but in latter years this has become more expensive, and the tendency has been to replace the pearl by celluloid and various vegetable preparations, as well as galalith.

Nearly every kind of button is made here, including horn, pearl, metal, vegetable ivory, linen, bone, glass, leather, and cloth-covered. The imports at present are chiefly vegetable ivory buttons from Italy and France and fresh-water shell buttons from Japan and the United States.

Birmingham is an exporting center, and imports relatively little. The exports to the United States during the past four years, in value, were as follows: 1911, $60,970; 1912, $56,275; 1913, $64,807; 1914, $56,493. These were chiefly buttons of the horn type. It is said that the importation is made direct from the manufacturers from samples, for local consumption and not for reexportation.

BRADFORD.

Consul Augustus E. Ingram.

At present Italy is supplying many Bradford dealers with vegetable-ivory buttons distributed through commission houses or agencies in London. It is also stated by local merchants that the preeminence in the vegetable-ivory trade once enjoyed by Hamburg has now been acquired in great measure by London, although Italy has secured an important part.

Owing to the closing of Continental sources of supply, the demand for buttons is exceedingly large; and, since the participation in the war by Italy, the shrinkage in stock is reported to be very great. A wholesale clothing dealer in Bradford states that the fancy ivory buttons required in his trade have advanced 40 per cent in price during the last 12 months. A merchandise broker, showing well mounted cards of pearl buttons, said that they had been imported from Japan, and that they were of good quality and not unduly high in price.

A majority of the largest button dealers in Bradford express a willingness to buy direct from the manufacturers or exporters of plain and standard varieties, but are unwilling to risk large orders of the fancy ones, owing to the danger that the vagaries of fashion and the changes of taste might leave them with obsolete stocks on their hands. There seems to be a belief, however, that by ordering from the manufacturer and eliminating the middleman the price might be reduced; but practically all merchants have declared that terms should be quoted c. i. f. Liverpool and not f. o. b. New York.

Among the retail dealers there is apparently a great shortage at the present time of metal buckles (such as are used for vests and trousers) and clasps or snap fasteners, such as are used for woman's wear.

There are no business houses in Bradford dealing exclusively in buttons. The largest buyers are the wholesale dry goods dealers and drapers who purchase from branch houses or agencies in the larger cities, or from the manufacturers themselves. The department and dry goods shops also carry large stocks in great variety of sizes and patterns. Their sales are in small quantities to home users of the sewing machine and needle. Such shops usually buy from traveling salesmen by sample, and rarely, like the tailors, and dressmakers, from the local dry goods brokers and drapers.

A special fretted, stamped, and colored button, often oval or oblong in shape and of fancy pattern for women's wear, has practically disappeared from the Bradford trade. This style was formerly made in Austria from a composition of milk chemically treated, which is known as "galalith."

Among the buttons formerly produced in Germany are those from unique manufactures of synthetic or artificial resins. Skillful imitations of ivory, horn, and similar materials can be made from this substance, which is transparent in its natural state, but susceptible of being made opaque by a simple chemical process.

Standard ivory and horn buttons have not advanced unduly in value (Sept. 2, 1915). The principal changes are noted in the fancy varieties of foreign manufacture. The following prices of vegetable ivory buttons (all four holes) are taken from the catalogues of English manufacturers: 22 line, $0.44 per gross; 30 line, $0.79; 36 line, $1.21; 40 line, $1.64.

BRISTOL.

Consul J. S. Armstrong.

There has been a steadily increasing demand for buttons in this consular district during the past few years. They are now being more widely consumed in the manufacture of dresses and costumes than ever before, and new varieties and novelties are constantly appearing on the market.

In the production of ready-made underwear for both men and women a low-class pearl button finds the most demand. This is made from a shell which, after the large size has been cut, would otherwise be discarded as waste and is accordingly a cheaper material.

Linen buttons are used extensively for homemade garments, as they can be washed and mangled without being broken. Pearl buttons of various shades find considerable demand in this market in the production of blouses, and many novelties are in use.

Self-shank pearls (smooth surface with black holes) are now very much in vogue in this district. They find particular demand for silk blouses, and are used in small sizes of various colors. A local dealer states that printed celluloid buttons are also in some demand for women's costumes. Novelties and exclusive designs are constantly appearing.

Buttons for men's suits and overcoats are chiefly ivory, and are either black, colored, or mottled. In the cheapest classes of trade, however, horn buttons are substituted.

Pearl buttons used in this district come chiefly from Japan and France, while those made of ivory are imported principally from Italy, and prior to the war came also in large quantities from Austria. Horn buttons coming from Japan are made to imitate ivory very satisfactorily, and are sold at a comparatively low price.

Austrian and German buttons were used in large quantities before the war. Fancy buttons as cheap as sixpence (12 cents) per gross were obtained from these sources. Cheap glass and other fancy blouse trimmings are now very scarce in this district, and it is pointed out that American manufacturers have, in present circumstances, an opportunity to increase their trade with this market.

It is reported that shells used in making buttons in this country come chiefly from Australia, Straits Settlements, India, and Dutch East Africa. Those used in the production of large buttons come principally from the tropical waters of Australia, along Exmouth Gulf, and a second species of mother-of-pearl, which is smaller than the former, is considerably used in England in the production of small buttons. This also comes largely from Australia.

Prices of supplies used in the clothing industry, including certain varieties of buttons, have considerably increased since the war.

Braid and crochet buttons, according to the price list of a local wholesaler (Oct. 14, 1915), are sold at 14 cents to $2.31 per gross, according to the quality. Fancy pearl buttons sell at 19 cents to $3.47 per gross; fancy metal buttons at 20 cents to $9.48, and glass buttons at 12 cents to $4.20 per gross.

One brand of ivory buttons sells in this market at 20 cents to 43 cents and shirt ivory buttons at $1.07 to $2.60 per gross. Another brand of ivory buttons is priced at 19 cents to $1.92 per gross.

Wood mold buttons known as "½ dome," ordinary get-up, sell at 24 cents to $2.60 per gross; and "special get-ups" at 27 cents to $2.12 per gross. Those known as "½ ball," ordinary get-up, sell at 42½ cents to $2.56 per gross.

For stock orders of importance local wholesalers quote prices at net 2½ per cent.

The production of woolen clothing is carried on in this city in large factories which have been modernized and also by numerous outworkers who receive payment from these manufacturers. A business dealing with Government contracts, such as military clothing, is an important feature of the local industry.

There is likewise a large output of medium and better class goods, in which a regular export trade is done. Men's clothing principally occupies the latter trade, but considerable business has grown up in meeting the demands for women's garments, and particularly for blouses. The clothing factories buy buttons in large quantities and in the women's trade are often able to design and retain their own styles.

Another industry of some importance in which buttons are needed is that of manufacturing waterproofs. This business has existed in Bristol for 60 years, and is reported to have shown a noteworthy growth during the past decade or so. A considerable export trade in raincoats is done with the British colonies in normal times.

Several large Manchester wholesale dry goods establishments (or warehouses) have branches in Bristol, whose business has assumed considerable importance, and some of the local branches import goods direct to this place. Usually, however, firms that use foreign buttons make their purchases by indirect importation from samples shown by local agents. The customary arrangements are payments direct to manufacturers, and the terms vary according to the length of credit. German and Austrian firms are said to have been lenient on the latter point.

HUDDERSFIELD.

Consul Franklin O. Vale.

American buttons are already stocked by the wholesale trimming houses in this city, being bought from the London agency from samples submitted. I am advised that the price is at present too high to attain any notable increase in sales, being greatly in excess of the Continental, and slightly more than the price of the English product. Some of the types of buttons for women's wear are also too heavy for the prevailing taste. If, however, these defects can be remedied I anticipate a successful future for the American makes.

The method employed by foreign manufacturers whose buttons enter this territory is the establishment of an agency at London or other large center. Active agents are appointed to cover certain districts, and they generally pay visits semiannually to the leading wholesale and retail stores, submitting samples for inspection. In a few instances direct importation has been made, but that is only where a particular firm had no agency in this country.

A firm in the trimming business at this post informed me that a good agency located in this city would doubtless meet with marked success, in view of the fact that the demand is increasing annually. The customary terms, for goods bought up to the 19th of the month, are an allowance of 3¾ per cent if remittance is received in settlement by the 10th of the following month; or, for a month up to six weeks' credit, a deduction of 2½ per cent.

Buttons are handled chiefly in this vicinity by wholesale trimming warehouses, which business is generally combined with woolen and dress materials. Some dry-goods stores also deal extensively in buttons, and the wholesale clothing houses consume a large quantity, as do also the various tailoring establishments for men and women.

LEEDS.

Consul Homer W. Byington.

Buttons, especially of vegetable ivory, are used in large quantities by the clothing factories of Leeds, which is said to be second only to London in the size of this industry. The other kinds of buttons in use are bone, horn, celluloid, composition, and tin. None are manufactured locally.

At the present time the chief competition American manufacturers would meet is with the British-made button. The scarcity of labor, however, is hampering British manufacturers, so that with the curtailment of supplies from continental Europe there is a good demand for American buttons. Of this fact American manufacturers are apparently not failing to take advantage.

In ordinary times foreign buttons are for the most part secured by indirect importation through local jobbers and wholesalers or through travelers for large importing firms in the seaport cities.

MANCHESTER.

Consul Ross E. Holaday.

This consulate has been notified by an English firm which formerly represented a German house that the competition to be met "consists of a difference of from 25 to 50 per cent in prices, for goods of equal value; easy terms of payment for goods and delivery free house Manchester." While this latter requirement may appear to be somewhat excessive there is every reason to believe that the Continental manufacturer has in the past offered better terms than anything offered by his competitors, and he has always had the advantage of being in close proximity to the market. He visits the district himself, or sends his traveling representative, who knows his customers, their financial standing and the character of the trade done by each. He is therefore in possession of important facts that enable him to favor the Manchester buyer or agent, the latter generally being responsible for the initial introduction. The demand for American buttons can be developed provided the above-mentioned competition is met, and the trade once secured should not be easily wrested away.

An important feature of the trade is the general warehouse trader, who sells goods to the smaller retail stores at wholesale prices. The general warehousemen obtain their supplies from importing agents and seldom direct from the manufacturer.

In general, foreign buttons are imported in the following ways:

1. Direct purchases are sometimes made from the country in which the goods are manufactured.
2. In very many instances buttons are purchased from the samples which are submitted to buyers in Manchester, and the orders are then transmitted directly to the Continental manufacturer who makes the shipment, the goods going straight to the buyer.
3. Indirect importation through local jobbers or wholesalers is not usual. The latter concerns buy from the agents here from stock and from the home trade warehouses.
4. Indirect importation is made through purchases from samples shown by a local agent, but the goods are usually invoiced in the manufacturer's name.

NOTTINGHAM.

Consul C. M. Hitch.

Nearly all kinds and sizes of buttons are used in the Nottingham consular district in the extensive blouse, hosiery, glove, and boot and shoe industries located here. Buttons of fancy colored glass, vegetable ivory, pearl, and xylonite material are used principally by makers of blouses, women's clothing, and millinery. Metal, bone, vegetable ivory, and cloth-covered buttons are used for men's clothing. Papier-mâché and pearl buttons are used largely by the manufacturers of boots and shoes.

In normal times Germany, Austria-Hungary, France, Italy, Japan, and the United States supplied the greater portion of the buttons used here. The remainder were obtained from the British manufacturers, but a very small percentage, probably 5 per cent of this remainder, is of local manufacture.

The buttons manufactured locally consist principally of covered buttons for women's dresses and outer clothing, and include also a small quantity of bone and vegetable ivory buttons for the hosiery and blouse trade. The vegetable ivory, pearl, xylonite, and fancy colored glass buttons were, prior to the war, almost entirely imported into this market from Bohemia and Germany, and the market is now quite depleted, especially of the cheaper glass buttons. The buyers of the latter kind are complaining of the lack of supplies and are looking to American manufacturers to meet their requirements.

Statistics showing the production, imports, and exports are not available, but a fair estimate of the value of buttons sold in this district annually would bring the total to between $500,000 and $750,000, with about 80 per cent of this amount representing imported goods. The exportation of buttons from this district is practically nil.

Since the outbreak of the war there has been a large and steady demand for American buttons of all descriptions, and, while American manufacturers have in many instances availed themselves of the opportunity to establish themselves here, there still remains an opening, especially for the makers of xylonite and vegetable ivory buttons, for which there is a large demand at all times.

Purchases are generally made by samples, through agents located in London, on the basis of 2½ per cent 60 days, except for the larger local jobbers, who import direct and pay cash.

CARDIFF, WALES.

Consul Lorin A. Lathrop.

As the population of the Cardiff consular district is industrial, the great market is for the strong and useful button for men's working clothes, and more metal trouser buttons are sold than of any other kind. An unusual proportion of metal buttons is made with a shank and removable pin. Buttons of bone, celluloid, ebonite, and papier-mâché find a considerable market. There is a smaller sale of buttons of leather, shell, pearl glass, and jet porcelain.

No buttons are made in the district and none are imported direct from overseas. All come from distributing centers in England, such as Manchester, Birmingham, and London. The English manufacturer may exceptionally sell direct to the Welsh retailer through his traveling salesmen, or by correspondence, but a jobber or wholesale dry-goods merchant in England is the usual intermediary. Such intermediary carries a varied stock from different English and non-British manufacturers, and he sends his representatives at regular intervals with samples to the retailers of South Wales. In normal times expert opinion in Cardiff reckons that an approximate half of the local supply is of non-British origin, reaching this market by rail through the distributer in England.

Supplies are greatly reduced. German, Austrian, and Belgian sources are entirely cut off, and shipments from Italy and France less than half the usual amount. Some button plants in England have been utilized for other purposes and the output reduced by labor shortage. The needs of the general public on the other hand are much less than normal, but the falling off in demand is not nearly so great as the reduction of supplies. The average rise in retail prices may be taken as 25 per cent.

The limited number of wholesale dealers and jobbers in the district almost precludes the idea of direct shipments. The district has no important industries, such as men's clothing factories, which would be consumers on a sufficient scale to buy direct. The department stores are to a limited extent wholesale dealers and sometimes supply small stores in the mining towns.

SWANSEA, WALES.

Vice Consul William L. Jenkins.

Official statistics of the annual importation and consumption of buttons in this district are not available, but the trade is regarded as normal for a population of about 1,580,000. No buttons are manufactured locally, those of British make in use coming principally from Leeds and Birmingham. A small business is done in covering button shells with cloth for tailors and department stores. In 1914 there were imported into the United Kingdom from foreign countries 8,212,700 gross of buttons and studs not of metal, valued at $2,678,156, as compared with 12,930,289 gross, valued at $4,445,007, in 1913, and 10,463,402 gross, valued at $3,379,175, in 1912. Of these, Germany, Italy, Japan, the United States, France, and Austria supplied the largest quantities. Buttons are used for the same purposes in general as in the United States, the principal users being found in the men's and women's clothing trade. Vegetable ivory buttons are in greatest demand, a smaller trade being carried on in those made of bone, metal, composition, pearl, horn, linen, and celluloid. Fancy ivory buttons made in Austria and Germany were bought extensively before the war; since then the Italian manufacturers have paid careful attention to the English requirements and have so improved the quality and style of their goods that they have been able to capture a considerable part of the business formerly in Austrian and German hands. The present Italian prices are lower than they were before the war and compare favorably with the former Austrian quotations. A local wholesale dealer states that the English manufacturers have not yet succeeded well in "mottling" their buttons, and until that is accomplished the fancy trade will continue to depend on imports from foreign countries.

No appreciable effect has been noticed by reason of Italy's having declared war, but should reports from that country show that its exports have decreased recently no better time could be found than the present for developing a demand for American buttons in this country. It is believed that with the South American supply of vegetable ivory so near at hand a sound and profitable export business should be established in the United States. A recent wholesale delivered price for vegetable ivory brace buttons, 28 line, was 10s. 6d. ($2.55) a gross. Small ivories cost wholesale (August, 1915) from 1s. ($0.24) to 2s. 6d. ($0.60) a small gross (144), medium size up to 3s. 6d. ($0.85), and large size up to 15s. ($3.64).

Bone buttons and patent metal buttons (such as for overalls) have increased in price since the outbreak of war. Trouser bone brace buttons, 30 line, that were sold by wholesale dealers at $1.58 a great gross (12 gross) five years ago now are selling for $3.04. The cost of these may be taken as 15 per cent below the selling price. Difficulty is experienced in obtaining the metal buttons at any price, but as the sale of both these and the bone ones is very limited in this district only a slight inconvenience is caused.

Wholesale dealers buy from large dealers in London, Birmingham, and Leeds, who supply samples both by mail and by traveling agents. Swansea trade can be best reached by introducing lines of American goods with the firms in these large centers. Tailors and department stores buy from local wholesale dealers and in many cases direct from London and Leeds. The retail business of selling to the general public for use in the homes assumes but small proportions. Wholesale dealers are accustomed to credit terms of 2½ per cent on two months. Cash against documents or on delivery will not be favored in this trade, as the quality of the buttons must be seen before acceptance.

EDINBURGH, SCOTLAND.

Consul Rufus Fleming.

In the button trade here it is not considered practicable for American manufacturers to compete in buttons for men's clothing. This is the conclusion reached by a prominent American firm that sent a representative to Great Britain several months ago to ascertain the opportunity for trade. American buttons, especially the vegetable-ivory type, are as well made as the Austrian and excel other makes in quality and finish; but the prices are much too high, as compared with Birmingham prices, to give them any chance in the trade.

American buttons for women's clothing, however, are now getting largely into the market and will probably secure a strong position, which our manufacturers may be able to hold permanently. Everything depends, as above stated, upon originality and variety of designs.

The button trade has been largely in the hands of Austrian, German, and English manufacturers, small quantities coming from France, Italy, and Japan. Broadly speaking, the buttons for men's clothing have been of Austrian manufacture and, to a far less extent, of English manufacture, and the buttons for women's clothing have been principally German. Austrian buttons are chiefly of vegetable ivory and pearl; the German types are of vegetable ivory, imitation horn, and leather; English buttons are of vegetable ivory and buffalo horn; French types are of vegetable ivory and fancy materials; Japanese buttons are mostly pearl of the cheaper grade; and Italian types are of vegetable ivory of medium and low grades.

Austrian buttons have had a high reputation for finish as compared with the product of any other European country. The vegetable ivory types of Austrian manufacture are notably well made, have a fine finish, beveled thread holes, and are evenly dyed. They are much lower in price than the English product, the average size of button for men's clothing having been sold in the recent past as low as 1s. (24⅓ cents) per gross.

While cheapness of buttons used for men's various articles of dress is a matter of some importance in the trade, the same thing can not be said of prices of buttons for women's clothing, inasmuch as women's garments are manufactured and sold at fancy prices and little consideration is given to the cost of such items as buttons. In this trade a great variety of designs is required. The prevailing fashions, which originate in Paris, regulate the demand for buttons all over Europe. But while France has created the designs, the buttons of common grades have been manufactured more extensively in other countries. Germany has taken the lead in this industry on account of the almost unlimited variety of buttons produced by German manufacturers.

Foreign buttons come into the market principally by direct purchases by wholesalers through an appointed agent or representative of the manufacturers. The sales method employed by some of the great firms on the Continent has been as follows: The manufacturers appoint an agent in London for the United Kingdom. This agent carries a large stock. He appoints subagents in Manchester and Glasgow. The London agent is paid a small salary and a liberal commission. He may sell directly to important garment-making firms as well as to wholesalers. The subagents sell to wholesalers (jobbers) in their territory and directly to large users. Between the manufacturers and the general agent the terms are, of course, a matter of arrangement. As a rule, the general agent is free to offer what terms he may deem advisable to his subagents and manufacturing firms with whom he may deal directly. The foreign manufacturers do not accept all responsibility for bad debts, generally stipulating that the agent shall be responsible to the extent of 15 per cent for any losses on sales in his territory.

The prices quoted to jobbers are net, all freight paid to destination, and 2½ per cent discount at 60 days.

GLASGOW, SCOTLAND.

Consul John N. McCunn.

Buttons are not manufactured in Scotland to any considerable extent, but are used in all clothing factories, such as those making shirts, underclothing, blouses, slops, mantles and hosiery, ready-made clothing, boots and shoes, oilskins, waterproofs, women's overalls, and children's wear.

Since the beginning of the present European war, many changes have taken place so far as the button trade in Scotland is concerned. Buttons are used both for buttoning and trimming, but they are a coarser type than formerly supplied, as is also the material now used in the making of costumes. The principal cloth at present on the market is in the nature of tweeds. Again, there are now practically no shades, the colors being black, navy, gray, brown, drab, and red. Saxes, purples, and greens are very difficult to get.

Before the war there was also a large sale here for black braid buttons made in Barmen, Germany. Celluloid buttons are no longer in favor. Ivory buttons always sell well in this market, but fine goods imported from New York are said to be high in price compared with the German and Austrian goods formerly imported. Medium and better-class ivories are always in demand. The cheap grades can be had in Britain.

Other classes of buttons imported from America are fresh-water, or Mississippi, buttons, principally used on men's shirts, women's underclothing, women's blouses, women's and men's hosiery, and children's wear; ivory nut buttons for men's clothing and women's skirts; boot and shoe buttons; papier-mâché buttons, used principally for the artisan clothing trade, which would be included under the heading of slop factories. Pearl buttons are in great demand at present, owing to the diminished supply from the Continent. Plain pearl, white and smoked, and fancy buttons, colored and carved, for women's coats, are the lines most called for.

Japan supplies shirt and blouse buttons of troca pearl and horn buttons for the men's and women's clothing trade. France supplies troca buttons of all descriptions for the blouse, underclothing, and men's trade; also mother-of-pearl buttons for the same purposes, while Italy supplies ivory buttons for hosiery, men's wear, and women's wear.

American manufacturers compete here by what is termed American fresh-water, or Mississippi, buttons. Their chief competitor previous to the war was Austria and to some extent Germany, but recently the Japanese have manufactured buttons out of the same shell. Americans confine themselves principally to two shapes, two and four hole tulips, all machine-made. These patterns they specialize in. The Japanese, on the other hand, are introducing all the well-known shapes. The American buttons of this class are loose, boxed in 10-gross boxes, or sometimes in envelopes of 1 gross. The quality is very mixed, and defective buttons are shown up, so to speak, after they are on the garment. Against this, the Japanese card these buttons, and a buyer is able at a glance to check the quality. The Japanese appear to be able to produce these buttons cheaper, and therefore give a better article for the money than Americans. The Japanese have also introduced horn, which, for a lower quality of garment, has taken the place of the ivory button, being much cheaper.

The purchasing of foreign buttons is done principally through local agents or by importers. The easier way is for the manufacturer to confine himself to the importer, thus obviating small orders, the importer supplying the consumer. Manufacturers have to adapt themselves principally to the terms that are customary in the district where the goods are supplied. The Glasgow terms, and in fact throughout Scotland, are one clear month from the 20th to the 20th, running practically into two months' credit for all goods delivered on and up to the previous 20th of the month. I further am informed that the terms are 2½ per cent if account is paid within 60 days, and 3 per cent if paid within 7 to 10 days.

Buttons are stocked by the haberdashery departments in the principal wholesale houses, but not to any extent, because very few factories would buy from these departments, and very little clothing of any description is now made in the household.

It has been pointed out that the careful sorting out of the qualities is most essential, and while American fresh-water buttons have filled the long-felt want of this class of goods, American exporters would be well advised to see that the qualities are not mixed. Especially in view of the Japanese competition, the extra care would well repay any additional expense incurred. My attention has been called, for instance, to a garment with three buttons on the front, of which two are fairly good, while one is thin and inferior. The garment loses a considerable part of its value from the buyer's standpoint. Operators who put these buttons on do not stop to select them. They simply use the box until it is finished.

BELFAST, IRELAND.

Consul Hunter Sharp.

The principal users of buttons in this consular district are the shirt factories, custom-shirt makers, and ready-made clothing manufacturers. The shirt factories and custom shirt makers use large quantities of pearl and bone buttons, and the ready-made clothing industry, the principal center for which is Belfast, uses large numbers of composition coat buttons, metal trouser buttons, bone buttons, and plain covered and fancy metal buttons for women's cloaks, suits, etc. The buttons used by the millinery trade in altering goods which were imported as ready-to-wear are of different classes and vary with the fashions.

Pearl buttons used by local firms in making the better grades of men's shirts and pajamas and women's shirt waists are, almost without exception, imported from England. In the less expensive types of pearl buttons, those of American manufacture appear to be most favored by local shirt makers. English and Italian buttons of this class are also used.

The metal trouser buttons used by local ready-made-clothing makers are of American manufacture, and American composition coat buttons are also largely used by the local trade. Fancy metal ornamental buttons, which are used on women's cloaks and suits and boys' suits, were of German manufacture, but as this source of supply is cut off local stocks are practically depleted and there is a growing demand. The only buttons manufactured in Ireland are crochet buttons, which are made in small quantities by crochet workers in country districts and are used for blouses.

There are no available statistics showing the country of origin of the buttons coming into Ireland nor can the value of the buttons imported be stated, as they are included under other headings, such as drapery, etc. Owing to the small quantities in which buttons are made in Ireland none are exported.

The competition to be met by American manufacturers of pearl buttons would be largely from England, and in a lesser degree from Italy. American manufacturers of metal trouser buttons and composition coat buttons are apparently not confronted with foreign competition at the present time. The fancy metal ornamental buttons, which prior to the outbreak of the war were supplied by Germany, are greatly in demand here at present, owing to the fact that this source of supply is now cut off.

Local purchases of foreign buttons are generally made through jobbers or agents in English centers. In an interview with the managing director of one of the large ready-made-clothing factories in Belfast, using approximately 10,000 dozen buttons a day, it was pointed out, however, that his firm would prefer buying direct from American button manufacturers, the terms desired being 2½ per cent discount for cash in 60 days.

For buttons purchased through English agents, the customary terms would be a discount of from 2½ to 5 per cent for cash, or 2½ per cent for cash in 30 or 60 days.

CORK, IRELAND.

Consul Wesley Frost.

It is estimated that the button trade of the south of Ireland approximates $225,000 per annum in gross turnover. The heaviest line is that of fancy buttons for the decoration of women's outer apparel. Prices have risen at least 15 per cent since the outbreak of the war, and the quality of the goods is not so high as formerly.

London distributors sell here all of the buttons taken by Cork merchants. A good number of these firms send traveling men to Cork once or twice each year and the remainder are visited by buyers from Cork on their annual or semiannual trips to England. The question of terms is not an important one, as in so closely knit a commercial community as the United Kingdom credit is very readily arranged. Most sales involve a 2½ per cent discount for payment within 30 days. Cash against documents is an unheard-of requirement, except as it shows up in abnormal transactions with American firms.

The composition buttons of ornamental description which form the largest share of the trade here were formerly brought from Germany and Austria, especially the former. At the present time English factories are supplying a good part of the stock, while American sources account for most of the remainder. Neither British nor American fancy metal buttons can approach in inexpensiveness or quality the buttons formerly procured from Continental makers. The finish is crude, the patterns inartistic, and the surfaces lack depth and luster in comparison with German buttons, according to the leading dealers in Cork. At the same time it must be said that for the present American buttons are in good evidence here and Irish patrons are learning to discriminate with regard to them.

The fancy button trade in the south of Ireland has, to a considerable extent, superseded the trade in fancy braids and dress trimmings, the displacement occurring at the time of the introduction of narrow skirts and similar styles which are not adapted to ornamentation by braids as easily as by buttons.

The buttons used for men's suits and women's tailor-made garments are mainly of Italian manufacture, and were so even prior to the war, although Germany supplied a portion. They are known as bone buttons, but are thought to be for the most part made of chemically treated nuts. The trade in this line of buttons is not large in this section of Ireland. Indigo black buttons also come from Italy.

Pearl buttons, such as are used on shirts and underwear, are mainly of Japanese origin and are obtained through the English [illegible] [illegible] houses. In fact, few small foreign sellers have ever come into contact with local buyers. Italy has furnished substantial quantities of pearl buttons and substitutes. Buttons are also manufactured in Birmingham, England. The Birmingham agate buttons are quoted at very low prices, ranging around [illegible] cents per great gross of 144 dozen. Pearl buttons are in some cases purchased through New York houses, but are thought to have been actually manufactured in Japan.

MALTA.

Consul Wilbur Keblinger, Valletta.

The last official census of the Maltese Islands, 1911, gave the population as [illegible]. Valletta, the principal city, has a population of about [illegible], and while there are other small towns scattered over the islands where the people lead a semiurban life, the greater portion of the Maltese are of the agricultural class and in most cases quite poor. Consequently the most general type of button used is of the cheapest variety—bone of various colors, common quality of mother-of-pearl, fancy glass, and metal. Of course there is a small trade in high-grade buttons, mostly for women's clothing. Previous to the war an imitation bone button was imported from Germany, which practically supplanted the English trade in the genuine article. There are a large number of tailors on the island, no ready-to-wear clothing being sold, and therefore the bulk of the button trade is with them.

All buttons are imported, there being no local manufacture of any kind.

There are no statistics available giving the amount of import trade in buttons in Malta, but it is estimated that the entire trade does not exceed $5,000 per year.

The countries supplying buttons here previous to the war, naming them in the order of their trade importance, were Austria-Hungary, Germany, France, Italy, and England. At the present time Italy is supplying the greatest number of buttons, with France and England furnishing those of the higher grades.

There is no reason why American button manufacturers should not get a good share of the Malta business, provided they can meet the prices at which similar articles are offered by manufacturers in Italy, France, and England, and be able to make deliveries within a reasonable time. The question of securing transportation facilities from America to Malta, however, at all times difficult, is at the present time almost insurmountable, but there is every reason to believe that conditions will improve in this respect in the near future.

Purchases generally are made through local commission houses, who sell from sample, and the goods are shipped direct to the purchaser by the manufacturer. There are a few tailors of the better class and some larger stores that place orders direct with the manufacturer, but the bulk of the business is through the commission houses. The customary terms with British manufacturers are cash with 2 per cent discount, and with Continental firms 3 or 4 months' acceptance for net amount.

Chapter VII.—ASIA.

CHINA.

Vice Consul General C. E. Gauss, Shanghai.

The "button" in general use by the Chinese on their native style garments is the ingenious cloth knot of the same material as the garment; the buttonhole is a small loop of the same material stitched in braid form on the garment. The foreign style button is in use to some extent, however, with the native style garments, more especially undergarments with plain white buttons; and, in place of the cloth knot on outer garments, more especially those of the women, fancy, ornamental buttons are now in style.

For many years brass buttons, globe or ball shaped, with ground surfaces worked up in a variety of fancy decorations and oftentimes bearing a stamped design of some Chinese conventional character, signifying happiness, long life, or wealth, constituted the bulk of the imports of foreign buttons.

Since the 1911 revolution in China, however, the use of these globe or ball-shaped buttons has fallen off. In their place are found fancy buttons in various styles, usually on the garments of the women, the ornamental parts being of varicolored glass, principally to appear like diamonds, set in brass or other metal.

As to foreign staple buttons, these are, of course, in use for foreign style costumes worn both by the foreign resident and transient population of China and by Chinese who have adopted the foreign style of dress.

Some buttons (including cheap mother-of-pearl buttons and brass buttons) are manufactured in China at Canton, but outside of these there is no button manufacturing in China, so far as is known to this consulate general.

The following table will indicate the extent of the button trade at this port, which is, of course, the distributing point for central and a great part of northern China. The value, where stated, is given in American dollars converted from the haikwan tael upon the basis of 73 cents to the dollar in 1913 and 66.7 cents in 1914:

Classification.	Imports from foreign countries and Hongkong.	Imports from Chinese ports.	Reexports to foreign countries and Hongkong.	Reexports to Chinese ports.	Net total imports.
1913.	*Gross.*	*Gross.*	*Gross.*	*Gross.*	*Gross.*
Brass	128,208	610	1,110	76,997	50,711
Fancy, glass, jewelry, etc	274,651	1,203	1,423	141,393	133,038
Mother-of-pearl	33,094	....	339	992	31,763
Porcelain	291,720	....	1,000	3,261	287,459
Total	727,673	1,813	3,872	222,643	502,971
1914.					
Bone	56,817	787	....	26,449	31,155
Brass	108,014	1,311	2,200	54,353	52,772
Fancy, glass, jewelry, etc	78,166	200	2,524	70,407	5,435
Mother-of-pearl	57,189	....	....	3,095	54,094
Porcelain	56,899	....	347	3,950	52,602
Total	357,085	2,298	5,071	158,254	196,058

The total value of the net imports at Shanghai in 1913 was $39,773, in 1914 $84,196.

The total value of the buttons imported into all China in 1913, included in the customs returns under the classification "Buttons, brass and fancy," was $382,557 (conversions made upon the basis previously stated). In 1914 it was $254,052. The quantities for 1911, 1912, 1914, and 1915 are given in the following table, by countries from which received:

Countries.	1911	1912	1913	1914
	Gross.	*Gross.*	*Gross.*	*Gross.*
Austria-Hungary	58,349	60,166	333,013	80,986
Belgium	1,770	1,690	3,290	2,048
France	2,152	1,072	12,595	2,752
French Indo-China	190	3,641	7,558	7,323
Germany	265,915	173,280	252,071	110,705
Hongkong	94,574	142,716	223,539	129,974
India	3,305	2,909	5,249	13,529
Italy	788	5,755	9,664	2,714
Japan	482,759	500,642	561,969	490,672
Macao	12	11	43	29
Netherlands	....	....	1,500	....
Philippine Islands	....	....	1,302	930
Russia	6,046	5,921	9,031	2,208
Siam	....	120	....	....
Singapore, Straits Settlements, etc	228	811	2,094	1,292
United Kingdom	7,515	24,295	22,692	9,694
United States	....	1,269	136	19
Total gross imports from foreign countries	923,603	923,338	1,445,746	854,875
Less reexports to foreign countries	4,378	5,252	6,081	8,884
Total net imports from foreign countries	919,225	918,086	1,439,662	845,991

Japan, Germany, and Austria appear to be the chief countries from which the button supply of China has been derived. While Hongkong figures largely in the statistics, that port is of course but a transshipment point for the various foreign supplies.

The Japanese buttons are for the most part of the very cheapest qualities.

Foreign buttons are usually sold to the Chinese woolen and cloth dealers from samples, through foreign importers and manufacturers' agents. There is very little direct business between foreign manufacturers and Chinese dealers in any line. The Japanese buttons are sold through Japanese brokers, who bring samples for inspection by the dealers and solicit orders.

The usual terms are from 30 to 90 days' sight, documents against acceptance.

There is at present some shortage of buttons on the China market on account of the suspension of German and Austrian imports, but new orders are not being placed rapidly because of the high price asked by other producers, roughly estimated at double the prices formerly charged for Austrian and German makes. Outside of buttons for use on clothes made for foreign residents of the country, price is of course the chief consideration. The button business is not, moreover, considered a particularly certain or profitable one in China.

HONGKONG.

Vice Consul General A. E. Carleton.

The type of button chiefly in demand in Hongkong and South China appears to be the bronze-nickel button, as best suited to withstand the climate. The steel button covered with nickel has not been found suitable, as it is apparently susceptible to rust. Bone buttons, if continually in use, are practical, but if not they are apt to gather some verdigris. Glass buttons are used to a limited extent. The pearl button from Japan is popular in the local market.

The convents in various parts of the Far East make an Irish crochet button in several sizes, and the retail price averages about 10 cents per dozen. These are not to be found in all the stores in Hongkong, since the greater portion of such buttons are sold from house to house by hawkers who carry lace and other articles of similar nature. For women's garments the button most used is apparently a linen button covered with the material of the gown. The local market seems to be fairly well supplied with buttons now in vogue.

The demand for the really fancy buttons is relatively small and it would not pay American manufacturers to seek this limited trade. All efforts should be given to serviceable buttons in common use, and particular attention should be paid to buttons suitable for the Tropics.

The large retail stores have their own purchasing agents, principally in London, purchasing on three months' credit. The general mode of business, however, is through a merchant firm or commission agent who shows samples and quotes c. i. f. prices. The customary terms are drafts at four months' sight, documents for payment, while the commission house here finances the Chinese buyers as suits himself. Before the war three to four months' credit was given to native dealers, but this is restricted if not altogether abolished now, and cash terms are in vogue. Most of the import and export houses give but little attention to buttons, as the trade is too small.

CANTON.

Vice Consul P. R. Josselyn.

Of the imported buttons, perhaps the principal business done is in clip buttons or snap fasteners. These are used very extensively by the Chinese, both men and women, on their underwear, sleeves, collars, etc. Before the war they were imported largely from Germany, but the goods on sale now come from Japan. They are sold on perforated cards, each section holding six buttons. The Japanese also import shell buttons similar to the kind manufactured locally.

There is also imported a considerable quantity of brass buttons of a type somewhat similar to those manufactured locally, and fancy buttons were imported from Germany and Austria. These fancy buttons come in an infinite number of shapes and varieties. They have no holes punched in them and are fastened to the garment by a wire loop either sewed to the garment or held in place by a double bar. Among the types of fancy buttons may be mentioned pearl buttons, pearl with brass rim, glass of various colors, enamel, agate, etc. They are sold in sets of five, mounted on a card, five being the number usually found on the front of a Chinese gown.

For the use of Chinese tailors who make European clothes, both for the Europeans residing here and for the small number of Chinese who have adopted European dress, there are also imported the ordinary buttons used for similar purposes in America. These come largely from England.

Large quantities of brass buttons of the native type are manufactured in the districts surrounding Canton and are exported in considerable quantities to the other parts of China. It is my understanding that the export of native buttons consists for the most part of this type of brass button. As these buttons are solely an article of Chinese dress they are not exported abroad to any extent.

There is also a considerable manufacture of shell and bone buttons in Canton, but it is purely a hand industry, the buttons being cut out, polished, and the holes punched entirely by hand. These buttons are used on the garments of those Chinese who have adopted a semi-European style of dress.

Of the shell buttons there is a great variety on sale in Canton, both with holes punched for sewing on the garment and also with a wire loop at the back of the button. Small shell buttons suitable for underwear, etc., are also manufactured.

As regards the price of the clip buttons above referred to, I was informed that before the war clip buttons similar to the samples forwarded were sold at 22 cents Mexican (equal to about 10 cents gold) per gross. The present price (Oct. 18, 1915) is $1.10 Mexican, or about 50 cents gold, per gross.

Foreign buttons are sold at retail by Chinese department stores and so-called foreign-goods shops, which handle a large number of foreign-made sundries. These stores buy their supplies by sample from British, Japanese, and (before the war) German import commission houses located either in Canton or Hongkong. As a matter of fact, the button business in Canton is handled largely from Hongkong, the goods shipped to Canton being for local consumption only. These firms sell goods by sample to the Chinese dealers and brokers, the order being in turn placed with the manufacturer or exporter in the country of origin. Orders are cabled and delivery can be made in about two months from Europe. The Chinese dealer is given two months after arrival in which to take delivery of the cargo. Two per cent off the invoice price is allowed if he takes delivery immediately on arrival. He pays cash for the cargo at the time he takes delivery. Drafts are usually drawn by the exporter abroad against the local commission merchant at 90 days sight.

The market for buttons in China, as well as for all other classes of merchandise, is essentially a low-priced market, and manufacturers in the United States must bear this fact in mind when considering the question of making sales here.

TIENTSIN.

Consul General Fred D. Fisher.

The following statement shows the imports of buttons into this port during the last five years:

Kinds.	From foreign countries.		From Chinese ports.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
1914.	*Gross.*		*Gross.*		
Brass	67,795	$16,459	4,276	$1,037	$17,497
Fancy, glass and jewelry	24,342	8,118	7,419	2,474	10,525
1913.					
Brass	96,508	25,362	7,451	1,968	27,365
Fancy, glass and jewelry	57,650	25,250	5,440	2,382	27,555

NOTE.—Conversions of currency are made on the basis of 73 cents as the equivalent of the haikwan tael in 1913 and 66.7 cents in 1914.

It will be noted that brass buttons, which are used chiefly by the military and civil branches of the Government, represent the largest part of the imports. These buttons were formerly imported chiefly from Germany.

From inquiries in the markets, I learn that there is a considerable sale of pearl (shell) buttons, which are used on Chinese underwear. Sizes are chiefly one-half inch and three-fourths inch, and the buttons are chiefly of Japanese manufacture. There is also a fairly large demand for glass and fancy buttons, used for Chinese women's and children's clothing, which were formerly imported principally from Germany and Austria-Hungary.

The Japanese manufacturers, with their cheap labor, plentiful supply of raw material, and close proximity to this market, have advantages in this trade that, in my opinion, would be very difficult for the American manufacturers to overcome.

The wholesale prices of the different varieties of buttons on this market, so far as obtainable, are as follows:

Kinds.	Price per gross.	Kinds.	Price per gross.
Pearl (shell) buttons:		Black horn buttons:	
¾-inch	$0.52	1-inch	$0.145
⅝-inch	.44	¾-inch	.082
½-inch	.34	⅝-inch	.063
⅜-inch	.26	½-inch	.056
Glass buttons:		White bone buttons:	
½-inch	.10	¾-inch	.18
⅜-inch	.08	⅝-inch	.16
Metal buttons:		½-inch	.14
Black enameled—			
⅝-inch	.14		
½-inch	.12		
White metal ⅝-inch	.82		

DAIREN.

Consul A. A. Williamson.

Buttons are in general use among tailors making European style clothing, which style is now commonly worn by the Japanese as business and dress clothes, although the Japanese style is also worn. Roughly, about half the male population (excluding Chinese) has at least one foreign-style suit. Foreign-style overcoats are also worn, and those Japanese who still keep to the old-style clothing often wear long capes or cape coats upon which buttons are used. There are a number of Japanese and Chinese tailors; of the latter, some three or four call themselves women's tailors. One dry goods store (branch of a Tokyo house) also has a women's and children's tailoring department.

As to styles of buttons, there is no marked preference for any one or more styles or materials to the exclusion of others. Those most commonly used are made of metal, bone, porcelain, shell, buffalo horn, or nuts, the shell and nut buttons being popular, and sizes range from 22 to 24 lines for vests, 30 or 32 lines for coats, and 36, 40, 50, or 55 lines for overcoats.

All buttons used here are imported, chiefly from Japan, where many kinds are made; others are said to be of Austrian manufacture, sold through German merchants in Japan, whence they reach here. One or two tailors who import cloth from England have buttons sent out at the same time along with the cloth.

The arbitrary classification of buttons by the Chinese customs here under only two heads, "brass" and "fancy," makes it impossible to tell much from their figures, but the statistics show imports amounting to about $18,000 in 1914. These show that a very large percentage of the buttons come from Japan, with Germany, Hongkong, and Chinese ports following. These figures, however, are not checked by examiners, as at other Chinese ports, but are taken from statements of importers. No buttons are made locally.

As none of the firms here using buttons have a large business, they generally buy from distributers in Japan, as mentioned above; hence it will be sufficient for American manufacturers to get in touch with Japanese or foreign distributers in Japanese trade centers, such as Kobe or Yokohama. The tailors mentioned above as buying buttons in England and having them sent out with the cloth buy through an agent of the British manufacturers in Kobe. It is practically certain that little business can be done here directly with a foreign country or by the catalogue and sample system unassisted by personal contact. In this connection, however, it is well to note that Germany usually started off in a new field with cheap goods, working up to the better class goods later on. This policy is a good one for the Orient. If American manufacturers prove successful in selling to Japanese distributers the business of this district would follow automatically.

MUKDEN.

Consul General P. S. Heintzleman.

There is a fair demand for buttons throughout this consular district, and the materials most favored are metal, bone, and imitation pearl.

The types of buttons imported are those used on Chinese jackets and undergarments. The former are a fancy detachable metal button in the shape of a ball or flat and about one-third of an inch in diameter, with imitation jewels inserted. The latter are similar to those used at home and seldom exceed one-half inch in diameter. No buttons of any description are manufactured locally. Owing to the fact that there are very few foreigners residing in this district, the demand for this commodity is confined almost entirely to the upper native classes, the working people fastening their garments with a knot, such as may sometimes be seen on foreign pajamas and sleeping suits.

Customs statistics show imports into Manchuria for the past four years amounting to 10,015 gross in 1911; 7,419 in 1912; 84,415 in 1913, and 42,579 in 1914. With the exception of a few that came from Austria and France, nearly all fancy buttons used here are of German origin. The bone and pearl buttons used come principally from Japan.

No American buttons have ever been introduced into this market. Now, however, importation from the Continental countries has ceased entirely. Even the Japanese are unable to produce fancy buttons of the same type and on the same terms, and the market is practically open to anybody.

Firms dealing in foreign buttons make their purchases by indirect importation through purchases made from samples. The German manufacturers were in the habit of granting four months' credit to local foreign firms, who on their part granted the native dealers two months' credit. Japanese manufacturers grant to their importers 90 days' credit, and they in turn grant the dealers 30 days, with the privilege of 15 to 30 days' extension.

FRENCH INDO-CHINA.

Consul Lawrence P. Briggs, Saigon.

The annual importation of buttons into the port of Saigon amounts to about 20,000 kilos (44,000 pounds), valued at a little over $20,000 United States currency. This represents the amount used, for no buttons are manufactured in Cochin China, and a very small quantity is exported. Buttons are used locally for clothing and for carriages. The use for clothing, however, is almost limited to the European population, the Chinese engaged in business, and the Chinese and native clerks employed in European offices. The buttons most in use for clothing are of horn, bone, corozo, metal, wood, paper, earth, and mother-of-pearl. The buttons used for carriages are usually of cloth-covered metal.

Statistics for the importation of buttons into French Indo-China are not immediately available, but about 70 per cent of those imports enter at the port of Saigon. France is the principal source of supply, having furnished $11,729 worth in 1914.

Most goods are imported into Saigon by a few large general importing firms. Indo-China carries on, however, a considerable parcel-post trade with other countries of the Far East and with Europe, and some buttons are imported by retail dealers. In either case purchases are almost invariably made through samples sent by the seller. The customary terms here are 60 to 90 day draft against bill of lading; but the leading importing firms do not object to paying cash if necessary.

During the past year Japan has been making a strong and not entirely futile bid for the button trade of Cochin China. A large button factory, recently established at Tonkin for the manufacture of all kinds of buttons demanded in Indo-China, is just beginning to send its product to Cochin China. With these facts in mind, as well as distance and cheapness and extent of market, importers and dealers do not think it possible for American button exporters to do any business here. They will be glad to receive prices and samples, but think it will be very difficult for France and other European countries to regain this market against the rising competition of Tonkin and Japan.

INDIA.

CALCUTTA.

Consul General James A. Smith.

Buttons are largely used in India by the middle and better classes of natives, as well as by Euproeans, but it is not possible to show the value of imports because buttons are included under "haberdashery and millinery" in the trade statistics. An estimate of the imports into Calcutta shows an approximate valuation of $114,000 per year. Buttons made of mother-of-pearl, ivory nut, and metal are the types that are in greatest demand. There is a demand for lentille China buttons, made in Italy, on account of their cheapness, and leather buttons are also imported in small quantities.

The types of buttons that are principally imported into Calcutta, together with the manufacturers' approximate prices c. i. f. Calcutta (Nov. 12, 1915), are as follows:

Kinds.	Price.
Mother-of pearl:	
Shirt buttons, first quality—	
16-line ... per gross..	$0.26
18-line ... do....	.30
20-line ... do....	.34
22-line ... do....	.38
24-line ... do....	.48
26-line ... do....	.56
28-line ... do....	.72
30-line ... do....	.88
Shirt buttons, second quality—	
16-line ... per great gross..	2.27
18-line ... do....	2.68
Metal:	
White, size No. 30 ... do....	1.60
Black, size No. 21 ... do....	1.60
Lentille:	
White, size No. 8 ... do....	.25
Black, size No. 8 ... do....	.41
Canary, size No. 77 ... do....	.50
Ivory-nut buttons:	
Plain, inferior quality, per gross for 2 sizes assorted ...	$0.14
Checked, inferior quality, per gross for 2 sizes assorted ...	.16
Plain, superior quality, per gross for 2 sizes assorted ...	.41
Checked, superior quality, per gross for 2 sizes assorted ...	.45
Plain, superior quality, per gross for 2 sizes assorted ...	.98
Leather:	
22-line ... per gross..	.35
30-line ... do....	.98

All the mother-of-pearl buttons are imported from Japan. Nearly all the vegetable ivory and all the lentille buttons come from Italy. The leather buttons and the most expensive vegetable ivory buttons come from the United Kingdom.

Pearl buttons of inferior qualities and horn, bone, and coconut-shell buttons are manufactured in India, but only to a very small extent in comparison with the demand, and details as to the amount of output are not forthcoming.

The principal firms of drapers and dry goods stores with tailoring departments obtain their requirements by direct purchases made and consummated in other countries. Other firms that use buttons, as well as wholesale traders in buttons, make their purchases by indirect importations through local wholesale commission agents, by whom samples are shown. The terms vary according to the financial status of the importers. It is customary to allow a credit of 60 days to firms of standing, interest being charged at 6 per cent up to due date of maturity of bills and at 12 per cent thereafter. In other cases importers are allowed to take delivery of goods on cash payment against documents.

The difficulty in the way of the sale of American buttons in India is in respect to price and quality. If our manufacturers can meet the prices here, they should be able to do a considerable business in this market. Personal representation will count for more than any other method in any attempt made to introduce American buttons, but if this is found to be impracticable it would be advisable for our manufacturers to send to the firms named in this report a line of samples of the principal kinds of buttons they manufacture, together with their prices, discounts, and terms of sale. A particularly important point is that prices should be quoted c. i. f. Calcutta and that a guaranty of delivery within a reasonable time should be given. Under present conditions, freight rates vary largely from one week to another, and it is impossible for importers here to estimate the cost of their merchandise unless the price is quoted c. i. f. Calcutta.

KARACHI.

Consul James Oliver Laing.

White and light brown buttons, chiefly pearl, but including also bone and other materials, are required in considerable quantities for the European population of this district, where, on account of the climate, white duck and light silk clothes are worn both by men and women.

Some china buttons are used also, chiefly on women's clothes. Metal buttons are not so popular, because the climate in many places is so humid that the metal rusts. Even highly enameled buttons do not last, owing to the violent laundry methods of the natives, and for the same reason the large pearl buttons have a patent attachment which permits of their removal when the garment is sent to the laundry. Among the natives the use of buttons depends chiefly upon the caste or wealth of the individual.

There are no button manufacturers in this district, and everything manufactured is more or less scarce here since the war began. Any inexpensive button should sell, especially the standard kinds for white suits or for dinner jackets or evening dress. If anything new is wanted, samples would have to be submitted, but styles change almost not at all among the natives and among the European men and not very greatly among the European women.

The length of time required to get goods from the United States has been a drawback in every line of business, but less in perfectly standard lines which the merchant or handler knows is going to continue to be in demand.

Houses of any size import direct from the country of origin as a rule. There are no button jobbing houses here. Larger merchants frequently sell to small tailors in the native bazaars, but these latter also order through indent houses.

Terms are usually sight draft at 30, 40, or 60 days. Sometimes these drafts are paid at once and sometimes not taken up until the end of the time period. Most large merchants pay cash against documents at once. The bank clears the goods and puts them into the bank's godown (warehouse). Rent is charged for this service, and the local merchant usually wants to clear them as soon as possible. Bank references should be taken here, especially at this time.

It would not pay to send an agent here to travel exclusively for buttons. A representative of an exporting house handling several lines of noncompeting goods might well do business here, however.

MADRAS.

Consul Lucien Memminger.

In this region, generally described as southern India, there reside under British rule 65,874,623 persons, mostly Hindus of Dravidian race. Europeans number about 30,000, consisting largely of Government civil and military people and merchants, British born. European dress is worn by only a small percentage of the native population, and that principally in the towns.

In several small establishments in Madras and elsewhere buttons of horn and bone are manufactured to some extent, and the local demand, particularly for shirt buttons, is thus partly supplied. Only a few workmen are employed in each of these places, but tools facilitating manufacture are in use, and the output in the aggregate is very likely not inconsiderable. These locally made buttons sell cheap, and are fairly durable.

Until April 1, 1915, the beginning of the official fiscal year 1915–16, buttons were not separately classified in customhouse returns, but were grouped under apparel and haberdashery. The total value of the imports of buttons by sea from all countries into Madras Presidency during the six months, April 1 to September 30, 1915, according to the customhouse returns, was $5,366. These imports, by countries, were as follows: United Kingdom, $945; Ceylon, $4; Straits Settlements, $822; France, $1,561; Japan, $1,982; Austria, $52; total, $5,366.

In the case of many articles handled by bazaars in southern India, however, the imports at Madras do not represent the full extent of the business, as the bazaars often receive a good part of their supplies through ports outside the district, notably Bombay and Calcutta. This would account for the fact that although Italy does not appear as a source of supply in Madras customhouse statistics, yet it is very generally stated by local bazaar dealers that buttons from that country are selling in southern India, and that Italy, in fact, has taken the place of Germany and Austria-Hungary in supplying this market. England, of course, sends a certain quantity, particularly for the European tailoring establishments. Very few buttons come in from America, and they are considered high in price.

There are several important tailoring establishments in the principal towns of southern India. Europeans generally have their clothes made here, and an increasing number of natives also patronize these establishments. Nearly all clothes are made to order, and ready-made garments have not even been introduced. Light clothing is worn on account of the warm climate, the favorite cloth being a mixed cotton and silk textile of brownish color made locally or obtained from China. Heavier cloths, such as tweeds, etc., which are worn in the cooler months by Europeans in certain parts of the country, are imported from England.

There is a great variety in the kind of buttons used in this country, owing to differences in native tastes, etc. For the European trade it may be stated generally that buttons for clothing are the same as in England, except that brown and white buttons suitable for tropical clothes are naturally especially in demand. For natives, cheap, ordinary buttons also for tropical clothes have most sale, but natives of means are fond of ornamentation in their dress and among this class gilded and fancy buttons or buttons of pearl are much in favor. Imitation pearl buttons sold locally are obtained principally from Calcutta, the business being done through local commission agents.

Local European commission firms nearly all have offices in London and are accustomed to receiving usual credit terms. These firms often act as an intermediary for native firms with regard to importation. To ordinary native firms European sellers do not, as a rule, grant more than 30 days' sight, care being exercised also as to exchange of references.

JAPAN.

YOKOHAMA.

Consul General George H. Scidmore.

There is practically no market in Japan for buttons for women's clothing, and for men's clothing the quantity used, though much greater, is also limited by the extent to which occidental dress has been adopted. Fashion among men is tending more and more toward European styles, however, and while the market for foreign buttons at present appears inconsiderable, the sale of outer-clothing buttons manufactured abroad promises to increase.

There is no market here for foreign buttons for underclothing, the large quantities of shell buttons produced in this country meeting this demand. The principal type of button imported is that made of ivory nut. A small quantity of silk-covered buttons is purchased from European countries for the dress clothes of Japanese officials and others.

About $1,250,000 to $1,500,000 worth of shell buttons are exported annually from Japan, while the total local output is valued at nearly $2,000,000.

The exports of brass and copper buttons during 1912, 1913, and 1914 were, respectively, 163,363 gross, valued at $34.265; 225.854 gross, at $39,770; 247,129 gross, at $37,057. Ninety per cent of these buttons were sold to China, and the rest to other Far Eastern lands. None were exported to Europe.

The exports of shell buttons from Japan during the last three years were as follows:

Countries.	1912		1913		1914	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Gross.		*Gross.*		*Gross.*	
Australia	413,771	$78,723	293,114	$71,689	420,174	$119,802
Belgium	233,053	14,578	261,557	39,476	139,190	24,589
British America	77,452	21,066	112,393	29,058	151,871	45,451
British India	272,863	56,820	382,778	85,016	580,932	146,211
China	95,347	30,172	113,777	34,844	113,599	30,790
Denmark	95,514	19,887	219,081	52,316	120,437	28.740
Dutch India	79,325	5,462	93,208	10,174	91,870	11,013
France	357,315	73,371	299,248	83,244	223,450	53,014
Germany	1,084,704	262,127	1,690,877	337,342	931,821	174,835
Italy	134,506	19,117	237,098	49,220	259,018	51,294
Philippine Islands	39,473	11,421	17,559	6,068	113,597	26,330
Spain	372,152	80,145	180,299	52,346	74,960	19,116
Straits Settlements	16,268	4,358	24,402	4,715	57,755	15,281
United Kingdom	971,867	202,425	1,689,107	449,942	994,377	235,825
United States	137,797	28,057	287,437	56,392	739,961	185,149
Other countries	624,475	80,816	617,163	111,565	506,350	90,759
Total	5,005,882	988,545	6,519,098	1,474,327	5,519,362	1,258,199

The following table shows the exports of horn and bone buttons:

Countries.	1912		1913		1914	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Gross.		*Gross.*		*Gross.*	
Australia	29,626	$4,819	90,326	$19,011	43,032	$7,773
British India	6,665	650	35,102	5,214	76,974	6,398
China	224,220	28,619	180,288	22,044	112,286	10,593
United Kingdom	87,103	11,397	133,404	30,329	25,358	4,560
United States	30	7			6,354	1,930
Other countries	118,548	13,747	163,362	22,862	90,221	9,315
Total	466,192	59,239	602,482	99,460	354,225	40,569

Other varieties of buttons were exported to the value of $29,925 in 1912, $35,764 in 1913, and $22,116 in 1914. About 55 per cent of these were consigned to China. The total value of button exports of all varieties was $1,111,974 in 1912; $1,649,330 in 1913, and $1,357,941 in 1914.

The following figures show the imports of buttons into Japan during the same years:

Countries.	1912		1913		1914	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.		*Pounds.*		*Pounds.*	
Austria-Hungary			3,760	$5,734	2,857	$4,578
France	2,093	$2,493	629	596		
Germany	21,523	29,482	24,757	36,418	12,928	20,022
Italy	3,976	4,410	6,001	5,739	11,331	13,910
United Kingdom	1,583	2,250	727	1,313	468	785
Other countries	484	566	281	323	585	686
Total	29,659	39,201	36,155	50,121	28,169	39,981

All other varieties of buttons imported into Japan amounted to $26,049 in 1912, $37,693 in 1913, and $23,026 in 1914. The total imports were worth $65,250 in 1912, $87,814 in 1913, and $63,007 in 1914.

As will be seen from the figures of imports, Japan has been principally furnished with buttons by Germany. One importer and wholesale dealer stated that he would be glad to substitute American for German buttons during the duration of the war, and even after its cessation, if the American exporters would treat them after the fashion of the Germans, for he realized the good qualities of the American article. This would seem to show that there is an opportunity for American manufacturers and exporters to establish a position in the button trade, and the way to bring this about is by selling at the same prices and on the same terms as the German merchants.

There are few exclusive button importers in Japan. These and the big department and dry-goods stores order their buttons directly from abroad for both their own retail trade and for selling at wholesale to tailors, who place orders with them for the varieties they need.

Between 30 and 60 days' credit is usually allowed. The consignee pays customs duty and charges.

The Japanese press, commenting upon the button trade of Japan, says that country can turn out shell buttons, but is not a good manufacturer of horn or metal buttons. Now that buttons from continental Europe are out of the market, however, not only those shell goods which are excellently manufactured, but horn or metal buttons which are not turned out so well are demanded by oversea buyers. Purchases by India and England are constantly increasing. The United States is the latest addition to the buyers' list and already her purchases are running up into a large figure.

KOBE.

Consul George N. West.

The types of buttons imported are some brass and copper, a very few hard rubber, and buttons covered with silk and worsted. These are imported by the few foreign tailors in small quantities. The types manufactured here comprise brass and copper, shell, bone, and horn, and those made from ivory nut. Silk and crochet buttons are manufactured on a small scale for foreign women's clothing.

The following is a quotation from the Japan Advertiser:

> Japan's trade in buttons is as prosperous as ever, and the factories in various centers are kept busy. The demand for shell buttons for export is so brisk that the productive capacity here can scarcely cope with the orders, but demand from Europe is not yet sufficient to send prices up. Orders from Russia and Australia are also plentiful. The demand in the home market is not so prosperous, and what little call there is can be met by rejects.
>
> The coronation has created a considerable demand for covered buttons for frock suits, and this variety, owing to the scarcity of raw material, has increased in value by about 20 per cent. Brass and other metal buttons are also dear owing to the rise in raw material, the present (October, 1915) quotation being from 75 sen (37½ cents U. S. currency) to 1 yen (50 cents) per gross. Takase shells are in brisk demand, scarcity in the Australian market having caused a rise of about 15 per cent. It is reported that owing to the recent briskness in this trade the number of workmen in factories in various centers has been increased by about 430 in all.

JAVA.

Consul Bradstreet S. Rairden, Batavia.

There are no buttons manufactured in Java, and consequently all the supply is imported, but no American buttons appear on the market. The principal types in use are of bone, pearl, metal, and glass. The imports in 1913 and 1914 were as follows:

Kinds.	Quantity.	Value.
1913.		
Bone buttons:	*Gross.*	
Holland	15,914	$7,042
United Kingdom	200	90
Germany	1,410	632
Italy	999	448
Total	18,523	8,212
Pearl buttons:		
Holland	4,435	1,332
Japan	123,368	37,010
Singapore	19,553	5,866
Hongkong	5,755	1,728
Germany	5,028	1,510
Total	158,139	47,446
Metal buttons:		
Holland	400,242	96,058
Germany	102,890	24,694
Japan	11,192	2,686
United Kingdom	10,584	2,540
Belgium	3,102	746
Austria	1,136	274
Italy	1,115	268
France	906	218
Total	531,167	127,484
Glass buttons:		
Holland	22,952	4,592
Germany	26,838	5,368
Italy	7,800	1,560
Total	57,590	11,520
Total for 1913	765,419	194,662
1914.		
Bone buttons:	*Gross.*	
Holland	19,436	$8,708
Italy	5,819	2,608
Germany	3,100	1,390
United Kingdom	1,302	584
Total	29,657	13,290
Pearl buttons:		
Holland	5,371	1,398
Japan	100,470	26,122
Singapore	8,718	2,268
Hongkong	1,572	410
Germany	958	250
United Kingdom	744	194
Other Countries	164	44
Total	117,997	30,686
Metal buttons:		
Holland	218,266	60,244
Germany	63,155	17,432
United Kingdom	8,972	2,476
Austria	2,180	602
Belgium	1,020	282
France	964	266
Italy	808	224
Singapore	668	184
Total	296,033	81,710
Glass buttons:		
Holland	3,646	940
Germany	6,602	1,726
Total	10,248	2,666
Total for 1914	453,935	123,352

The large firms in Java using buttons import direct and pay cash against documents presented by banks. The smaller firms purchase from the wholesale importers, from whom at least one month's credit is granted, and sometimes two months to good customers.

PERSIA.

Vice Consul Ralph H. Bader, Teheran.

In Persia bone buttons seem to be preferred, although one finds the other types used in Europe. Cloth-covered buttons are made locally but not in great quantities.

The total imports of buttons into Persia were valued at $43,766 during the year ended March 20, 1914, and of this amount $25,115 was from Austria-Hungary and Germany, countries that are at present unable to participate in Persian trade.

There are no large importing houses in Persia as in other countries. Each store imports its own wares, carrying on a business similar to that of a crossroads store in an American rural district. Merchants usually buy buttons from samples sent out by manufacturers in Europe. Goods are generally sent to be paid for on delivery, although some manufacturers grant a credit of two or three months. Teheran tailors buy the buttons they use from local dealers.

The following table shows the value of imports and exports of buttons during the years ended March 20, 1913, and March 20, 1914:

Countries.	1912-13	1913-14
IMPORTS.		
Austria-Hungary	$10,521	$12,091
Belgium		4
France	1,298	1,254
Germany	5,960	13,024
United Kingdom	788	232
India	3,308	4,664
Italy	991	3,718
Russia	5,575	4,103
Sweden	388	1,583
IMPORTS—continued.		
Turkey	$3,115	$3,093
Total	31,944	43,766
EXPORTS.		
Afghanistan	401	270
Russia	45	300
Total	446	570

STRAITS SETTLEMENTS.

Consul General John P. Bray, Singapore.

The market for buttons in the Straits Settlements and the Federated Malay States is an unusual one in that there is practically no demand for what is known as staple buttons, while there is a fairly good demand, considering the small population, for fancy buttons. This is due to the fact that, of a population of some 2,500,000, there are not more than 12,000 Europeans, the remainder being native Chinese, Malays, Eurasians, and various classes of Indians.

No buttons are manufactured in this district, imports heretofore having come from Germany, Austria, and England. There are no Government statistics available as to the number of buttons imported, but from an estimate gathered from information furnished by merchants of Singapore it appears that in past years there has been approximately 100,000 to 120,000 gross imported annually, at a value of from $50,000 to $60,000, United States currency. This importation has been considerably reduced since the outbreak of war, and the stocks now being used are those that were imported prior to the beginning of hostilities.

. Foreign firms have been very active in making new designs of fancy buttons, and competition in designs and prices has been most keen between British, German, and Austrian manufacturers. It has been the custom for all firms to send out samples of new designs from time to time, from which orders are made direct.

There is one style of button imported largely into this district, manufactured of white glass and of the size of an ordinary coat button, which it is believed could be successfully manufactured in the United States in competition with the German or Austrian buttons. Other styles sold extensively here, made of brass or nickel with a combination of glass, are sold at extremely low prices by the Austrian firms, and it is doubtful whether American firms could compete in this line, except possibly under present war conditions. The glass buttons above referred to sell (Oct. 8, 1915) at approximately 50 cents United States currency per gross, while some of the more fancy ones of brass or nickel sell at 75 cents to $1 per gross.

Practically all of the buttons are imported into this district by two or three large importing firms of Singapore who act as distributers to the bazaars, as the small Chinese and native retail shops are known. Purchases are ordinarily made by direct order from samples, the manufacturers drawing for the amount of the invoice at time of shipment upon branch houses of the importers located in London, Berlin, or Paris.

Importers of Singapore indicate that possible orders placed in the United States would be paid for in cash or by cash against documents.

Although prices quoted herein were paid to foreign manufacturers previous to the outbreak of war, it is possible that buttons would find a market in this district at the present time at somewhat higher prices owing to the shortage in the supply from Europe.

TURKEY.

CONSTANTINOPLE.

Consul General G. Bie Ravndal.

In the Anatolian peasant costume, buttons are entirely eliminated in the trousers, which close by means of a cord, like a bag, around the hips. The short, vest-like coat is provided, like all underwear, with cheap porcelain buttons, which are imported from a few firms in France, Germany, Austria, and Italy. Russia also tries to export porcelain buttons, but the quality is inferior and the demand insignificant.

It is curious to note that there is no competition among these various manufacturers. In 1909 they formed a syndicate and increased their prices by 40 per cent, which level they have maintained ever since.

The total annual imports of porcelain buttons into Turkey are estimated at $90,000. They appear in all shades manufactured, except red, which contains a small percentage of gold and is therefore more expensive. The best seller is the shade called mineral, something between gray and brown. The porcelain button trade is closely linked to that of porcelain pearls which are made by the same manufacturers and used for a variety of purposes, sometimes being substituted for buttons, especially in women's native dresses. Both porcelain buttons and pearls are used for decorative purposes on men's and women's national dresses. The same type of buttons is used by a large number of people for their underwear.

The buttons used for the European style of dress are made of the usual variety of materials, of which the most common is vegetable ivory.

American manufacturers would have to sell through the commission agents, because any one merchant here is not important enough to take over the exclusive selling agency. Three to six months' credit should be allowed. This is very important, because the dealer, as is apparent from the foregoing, has a small capital and is accustomed to liberal credit, especially from Austria.

The system of indirect importation through purchases made from samples shown by a local agent is mostly in favor here for all articles.

BEIRUT.

Consul General W. Stanley Hollis.

Before the war the imports of buttons into the seaports of this district averaged (values) per annum as follows: Beirut, $37,500; Haifa, $2,500; Tripoli, $10,000; total, $50,000.

These figures have been obtained from a canvass of the leading merchants, as no statistics showing the value of such imports are to be found here. The amounts were divided pretty equally between staple and fancy buttons.

All buttons used here have to be imported, as none are manufactured in this country. Of the estimated total, some 80 per cent are of bone, and these came from Italy principally, as the prices of the Italian manufacturers are lower than those of other dealers. The remaining 20 per cent of the buttons came from Austria and Germany. Of the fancy buttons, the cheapest, 60 per cent in volume, came from Germany and Austria; the better grades, some 20 per cent in volume, came from Italy, and the remaining 20 per cent, the best grades, came from France. As no American buttons have ever been offered on this market, it is impossible to form any opinion as to the competition they would have to overcome. The principal obstacles to the introduction of American goods here in the past, and especially goods of an expensive quality, have been the high freight charges and the losses by pilferage sustained at intermediate ports of transshipment.

There have never been direct lines of communication between American ports and Syrian ports; all shipments of goods between America and Syria, or vice versa, have had to be made via intermediate European ports of transshipment.

There are no manufacturing concerns here using buttons. The purchasers of buttons are tailors (all of whom have very small establishments) and housewives. Before the outbreak of the war there were many commission merchants here, representing various European button manufacturers, who sold from samples. Many commercial travelers carrying lines of buttons used to visit Syria every year and canvassed the leading towns pretty thoroughly for orders. The cloth merchants, also, used to handle buttons as side lines. Some had their own European connections, while some bought through the commercial travelers.

The term of payment offered to Syrian purchasers of buttons was always very liberal—cash from three to four months after the receipt of the goods.

SMYRNA.

Consul General George Horton.

The import trade in buttons is a very important one in the Smyrna consular district, as there are no local manufactures. The materials most favored for the well-known types are mother-of-pearl, glass, and stone, also pasteboard, cloth, and wood. For the army none but metal buttons are in use, sold in great numbers for military uniforms. They are for the most part galvanized and more expensive than the ordinary buttons. No American buttons have thus far been seen on this market.

There are no Government statistics showing the annual imports of buttons in the Smyrna consular district, but from information collected from competent business men in this line, the annual needs of this market are estimated at about $15,000 to $20,000 worth of buttons for men and to $8,000 for women, supplied principally by Italy, Austria, Germany, and France, the first two holding the bulk of the trade. Smyrna acts as the distributing center for the whole Vilayet of Smyrna and for some of the islands of the archipelago, to which the buttons are reexported.

No particular preference is given by local importers and users to any of the European supplying countries. The article finding the better market and most favored by the consumers is that selling cheapest, without regard to the source of supply. It is generally thought here in competent commercial circles that the United States can successfully compete, provided the prices for American buttons can be brought in line with those of the furnishing countries and provided also the same facilities offered by European manufacturers could be accorded to the Smyrna buyer; that is, prices to be quoted c. i. f. Smyrna, including packing expenses, cash payment after receipt of the goods with 5 per cent discount, or delivery of bill of lading against a from four to six months' acceptance.

In general, buttons are imported indirectly, from samples shown by local agents.

Chapter VIII.—AFRICA.

While the button markets of Africa are small, they are, in the aggregate, of much interest to American button manufacturers, especially because they represent a part of the reexport trade of European centers, particularly London. The colonial markets in each case are supplied chiefly from the mother country—South Africa from London, Tamatave from Paris, Laurenço Marques from Lisbon, Libya from Italian centers—each of these European sources, however, importing in turn from foreign manufacturers to a considerable extent.

EGYPT.

Consul Arthur Garrels, Alexandria.

In proportion to its population Egypt offers but a limited market for buttons. The native Arab garb being a buttonless garment, the demand for buttons is confined to the requirements of the Europeans and the effendi class of native. The imports of ready-made clothes are unimportant.

The material most favored for buttons in order of quantities consumed is mother-of-pearl, cloth, bone, and metal. There is no local production of buttons in Egypt, the entire supply coming from abroad. Egyptian customs statistics do not specify buttons, but Austria, Germany, and Italy have been the principal sources of supply. No specific method of purchasing prevails. The larger department stores have their buyers in the European trade centers; European traveling salesmen regularly visit Egypt and one or two local agents canvass the trade. Terms vary from spot cash to six months. Three months, however, are the more common terms.

KONGO.

Vice Consul Harry A. McBride, Boma.

The aggregate demand for buttons in Kongo is comparatively small, owing to the fact that there are only about 6,000 white inhabitants in the colony. There are three classes of buttons in use; the first, mother-of-pearl buttons about three-fourths of an inch in diameter with a small ring on the back which may be inserted in a buttonhole and fastened on the reverse side by means of a small wire clasp or ring, such as are used on fancy wash vests in the United States. This kind of button is used on the white duck coats which are worn almost exclusively in Kongo, the retail price of such buttons being 2.50 francs (48 cents) per dozen. A few brown bone buttons of this kind are also sold for use on khaki coats. Next in importance is the common bone trousers button, about one-half inch in diameter, which retails at 25 centimes (5 cents) per dozen; and third, plain mother-of-pearl shirt buttons about one-fourth inch in diameter, retailing at 50 centimes (10 cents) per dozen.

There is no market for buttons such as are used by women's tailors, as there are very few white women in the colony, and the native women generally use pins as fasteners.

As there are no button manufacturers in Kongo, all articles of this description have been imported from Europe and, until the outbreak of the war, the entire supply was of Austrian or German make. More recent imports have been of British manufacture. The official statistics do not show the quantity or the value of the imports of buttons, but it is estimated that the annual consumption in Kongo is somewhat less than 1,000 gross.

Buttons are sold by the merchants handling general merchandise, practically all of whom have buying offices in Europe. When a certain kind of button is wanted by the local firms, they send a sample to the European office, which purchases the article from wholesale houses or from manufacturers' agents, the order then being assembled and shipped with other goods for the same firm to Kongo. Local merchants are usually allowed three months' credit.

American exporters might be able to interest the Kongo trade by sending samples with prices to the merchants here and requesting that, if satisfactory, the buying offices in Europe be asked to correspond with them. As has been explained, the demand is limited; but, on account of the difficulties met with in obtaining this sort of merchandise in Europe at the present time, it may be possible to introduce American goods to some extent.

LIBYA.

Consul W. Roderick Dorsey, Tripoli.

Buttons are not in general demand in this district, and none are manufactured. With the exception of about 50,000 Europeans and Jews, the inhabitants, over 1,000,000 in all, are Arabs, who wear their native garb. Of these the great majority are nomadic Bedouins. A varying sale for buttons arises from the presence of Italian garrisons at several points in the colony.

A variety of types of buttons enter the market; but the mother-of-pearl, shirt size, constitutes the principal item. Next in favor are bone, composition, and metal buttons for male garments, and then the many styles for women's use in pearl, covered, glass, etc., in numerous sizes and shapes. There is also some sale for snap-clasp buttons for officers' uniforms. The total imports of buttons are estimated at $8,000 to $9,000 a year.

As this market is essentially one of small orders and quick deliveries, it is not believed that business with distant America could be successfully conducted direct. Like most unimportant American lines, buttons well placed in Italian centers will stand the best chance of a sale here. Practically all buttons come from Italy at present, where they are ordered from established samples, through travelers or the visits of the larger dealers to Italy, or through the principal houses there that have branches in Tripoli. Small tailors and shopkeepers get their supplies from the local jobbers.

Terms to importers are usually cash against documents, Tripoli, and sometimes 30 days. As between jobbers and small dealers, credits are a matter of arrangement, founded on knowledge and experience.

MADAGASCAR.

Consul James G. Carter, Tamatave.

It is possible to find all classes of buttons in the various shops in Madagascar, but those mostly used are the ordinary white bone buttons for trousers, both the suspender and fly sizes. These usually have holes, are without rims, and are used by the general population on all kinds of garments. Coat-size buttons of tortoise shell, bone, and mother-of-pearl, with round metal shanks and their accompanying rings, are also used to some extent on the closed front white drill and khaki costumes worn generally by the male population other than natives. Mother of-pearl buttons, of various sizes with holes, are also used in connection with dresses and other clothing of the European and assimilated population of about 10,000.

All buttons used in Madagascar are imported, there being none manufactured or exported locally. The total quantity imported in 1914 was 7,307 pounds, valued at $6,395, compared with 12,011 pounds valued at $7,990 in 1913, and 6,214 pounds valued at $4,057 in 1912. War conditions are responsible for the shortage in the importation for 1914.

Practically all of the buttons used in Madagascar come from France free of duty, while those manufactured in other countries are subject to the high French customs tariff, which on these goods is almost prohibitive. American buttons are placed at an even greater disadvantage than are those from Germany and Austria, being subject to the French general or maximum tariff, averaging for the kinds in demand from $16.63 to $131.30 per 100 pounds. Local merchants appear still to be able to make purchases on the French market. Unless that market is unable in the future to supply the demand, and in consequence the tariff on buttons imported into the colony is lowered or suspended, there would not appear to be any chance for American buttons to compete on this market. The terms before the war were usually 90 days sight, but at present they are from 40 to 60 days sight. Cash upon arrival against documents is also often exacted.

PORTUGUESE EAST AFRICA.

Vice Consul J. O. Spence, Lourenço Marques.

While the entire population of the colony is estimated at 3,000,000, only 10,000 of this number are Europeans. Lourenço Marques, the capital, and Beira, the second largest seaport town, have an aggregate white population of 6,000, the remainder being scattered throughout the rest of the Province.

There is no local manufacture of buttons and the annual importation in the district, according to the best estimate, does not exceed $2,500 in value. It is impossible to give the exact figures for any year, as the local customs statistics do not classify buttons separately. It can not, however, be said that the above figure represents the value of all buttons that enter this colony, for a considerable quantity of ready-made clothing is also imported from Europe.

Glass, celluloid, horn, pearl, and metal buttons are the types most in demand, there being no marked preference for any given variety. Prior to the European war Austria and Germany were the largest suppliers of the local market, Great Britain and Japan being customers of lesser importance. Since the war the two last-mentioned countries, especially Great Britain, have secured the trade.

One of the principal local dealers has reported to this office that he has just received a sample order of glass and horn buttons from the United States which he finds to compare favorably in quality with those of other origins, but they are higher in price. There is no general prejudice whatever against American buttons and the only reason why they are not in demand is that they have rarely appeared on the market. The best way for American manufacturers to secure a share in the trade would seem to be to send samples to the firms dealing in buttons, giving them their best discount rates.

Firms using foreign buttons usually make their purchases by indirect importation through samples. Lisbon acted as a chief medium of purchase between manufacturers in Germany and Austria and local dealers, and even at present sends a considerable amount of British and Japanese products which have been nationalized there. There is not a single firm importing or selling buttons on the wholesale plan, there are no local agents representing manufacturers abroad, nor is there any one established here solely as button dealer.

The import duty and other taxes on buttons of all kinds are as follows: Tariff duty, 3 per cent ad valorem; municipal tax, 25 per cent of tariff duty; commercial contribution, 3 per cent ad valorem; municipal contribution, 50 per cent of commercial contribution.

UNION OF SOUTH AFRICA.

CAPE TOWN.

Vice Consul General Charles H. Heisler.

The market for buttons in this country is a relatively small one. The entire white population does not exceed 1,400,000, with only 300,000 of the 4,500,000 black population classified as civilized.

The purchasing power of from three to five natives is considered equal only to that of one white inhabitant. Therefore, the total population to be considered commercially is about 3,000,000.

All types of buttons are imported for both men's and women's wear, and the only competition the American producer is facing at present is with England, and, to a limited extent, France. No buttons are manufactured here.

Many South African importing houses maintain an agent in London and their stocks are obtained through this representative, buying direct from the factory. Firms which are not represented in Europe often buy from samples shown by agents in South Africa, these orders being confirmed and paid for in London. The usual terms when goods are bought in Europe are cash. When shipped direct from factories to South Africa, terms are usually 90 days sight draft, documents on acceptance.

Cape Town acts as a distributing center for this consular district, and the importing merchants send their representatives throughout the Cape Province with samples.

DURBAN.

Consul William W. Masterson.

Government returns take no account of buttons separately, but the largest retail dealer in this city estimates that the imports are worth about $125,000 annually. This estimate does not include the buttons on men's and women's imported ready-made garments, nor does it include cloth-covered buttons, which are made by the local tailors and dressmakers. The varieties in greatest demand are the same as in European countries, chiefly vegetable ivory and pearl, supplied, respectively, by Italy and Japan, but imported to this district from London.

Many of the retail dealers as well as the wholesalers import direct.

PORT ELIZABETH.

Consul E. A. Wakefield.

All the principal wholesale importing houses here carry stocks of such buttons as are in demand throughout South Africa. The stocks are larger and trade greater than the business of this district alone would require by reason of the fact that Port Elizabeth and East London are the distributing entry ports for a considerable proportion of the trade of the Orange Free State and Transvaal. The types of buttons imported are those in common use by Europeans. None are made here.

No reliable statistics are obtainable, as customs entries are included under the general head of "Haberdashery," but according to the best estimates which I am able to obtain button imports into this consular district for each year average between $150,000 and $175,000.

It is estimated by most of the local importers that 50 per cent of these have been from Great Britain and nearly all the rest from continental Europe, chiefly Austria and Germany. At the present time fairly considerable quantities of buttons are being imported from America and, in accordance with the belief of importers with whom I have had interviews, opportunities for American participation in this trade are increasing daily.

Nearly all the large importing houses have London offices and one or two of them have New York offices, or properly speaking, New York agencies. Some of the American products at the present time are obtained through the New York export commission houses (those having South African offices do the bulk of the trade) and some are obtained by direct purchase from the exporter.

Terms of payment are matters of arrangement and vary from cash against document, f. o. b. New York, to drafts at 30 or 60 days' sight, Port Elizabeth. The former method is customary in establishing business relations unless credits are known to be satisfactory.

The trade now seems to be particularly favorable for fancy buttons, including waistcoat sets, blouse sets, and buttons for women's costumes. The ball-shaped crocheted button seems to be in particular favor just now (November, 1915), especially for women's coats and wash costumes.

As one of the leading importers expressed it, all sorts of fancy buttons, if at all attractive, have a particularly ready market here at the present time.

The duty in British South Africa on ordinary buttons of all descriptions—plain, fancy, and otherwise—imported other than from the United Kingdom and reciprocating colonies, is 20 per cent ad valorem. Similarly, on buttons composed wholly or in part of gold, silver, or parts of either, the duty is 25 per cent. There is a rebate of 3 per cent ad valorem on these articles imported from the United Kingdom and British reciprocating colonies.

JOHANNESBURG.

Consul Edwin N. Gunsaulus.

The button trade in this district is small, the white population numbering about 210,000, and ready-made clothing for men, women, and children being very largely imported. The imports come either from the manufacturer direct or through agents in London and other large centers, who send out samples.

All types of buttons are found in this market, but one which has a comparatively large sale is a medium-size black bone button, the average landed cost of which is 1s. 9d. ($0.42) per gross. A smaller size of the same article comes next in popularity, and costs 5½d. ($0.11) per gross. A tin enamel button, somewhat similar in appearance to the bone buttons just mentioned, is imported in fairly large quantities for the Kaffir trade especially. Along with the button trade there is a considerable market for buckles, hooks, etc., which are now rather difficult to obtain. No buttons are manufactured here.

While the market would probably not justify American manufacturers in sending their representatives here to canvas the territory, they will undoubtedly find it to their advantage to cultivate the trade in other ways, by sending samples, with prices and other full particulars.

In this connection it may be well to mention that attempts are being made to manufacture clothing on a larger scale than is now being done, and when this is accomplished, as it likely will be, it will naturally stimulate the trade in buttons.

Chapter IX.—OCEANIA.

AUSTRALIA.

SYDNEY.

Consul General J. I. Brittain.

The consular district of which Sydney is the principal and only commercially important city is a normal English-speaking colonial community, taking its ideals primarily from Great Britain and following British practice in all matters of fashion and dress. Therefore the buttons required here will be found to correspond closely with those used in other British territories where conditions of climate and material well-being are similar. The population has not yet reached the 5,000,000 mark.

The nonoccurrence of extreme cold weather has its influence upon the demand for buttons suitable for heavy overcoats and corresponding articles of apparel, but, on the other hand, the long summers call for relatively large supplies of buttons for light fabrics.

Up to the present time no buttons have been manufactured locally. The trade has been supplied solely from imports. To these various countries have contributed, but practically the only competition which the American button manufacturer will meet if he enters the Australian field to-day will be British and Japanese.

It is probable that a certain amount of success would follow a campaign by mail, the dispatch of catalogues, samples, and explanatory letters, but the only really satisfactory method is to send out direct representatives, fully equipped with samples and armed with authority to meet with definite and final proposals any new conditions of trading which may be found in a fresh field. To this end it is wise for the interested manufacturer to use great care in the choice of his emissary. Australia is too advanced a country to listen to the experimental arguments of a junior salesman.

Much of Australia's wholesale buying of small wares like buttons is done through purchasing agents in London. The jobber, or, as Australia knows him, the warehouseman, is the source from which small local stocks and supplies are purchased. In a word, there is little difference between Australian methods in this regard and those of other English-speaking countries. Some direct ordering, "indenting," to sample is done by the larger consumers, but the "warehouse" is the medium through which ordinarily supplies are distributed.

It would be an error to consider Australia a large market for buttons, but the credit standing of the big firms is good on an average, and their purchases well worth bidding for. R. G. Dun & Co. have offices in all the leading centers of trade and can furnish status reports as in the United States.

MELBOURNE.

Consul William C. Magelssen.

The amount of the imports into Australia can not be stated, for the reason that in the Australian customs returns buttons are not listed separately, but are included in "buttons, buckles, clasps, and similar articles for apparel and attire." The imports for the Commonwealth under this heading amounted to $717,346 in 1914-15 (12 months).

Buttons manufactured in the United Kingdom are admitted free of duty, while buttons brought to Australia from other countries are subject to an ad valorem duty of 10 per cent. Since the beginning of the war the Japanese have entered with a dash, supplying well-made buttons of the cheaper kinds, principally pearl. Some business has recently been created in American buttons, but I am informed by a leading importer that certain shipments have come to hand from the United States which have proven worthless, many of the buttons in some designs having fallen to pieces in transit and handling.

It is stated that American designs of celluloid and other high-grade buttons are excellent and that in price they compare favorably with the British, but the British high-class buttons of celluloid and superior compositions are said to be firmer and stronger, and if not of so perfect a gloss and so choice a pattern as the American, they are preferred because of their reliability.

The importing of buttons is done principally by wholesale houses, which purchase from manufacturers' samples in London, the goods being selected from the ranges of many makers to the open order of the Australian house. Some of the larger department stores import their own buttons, as do also a few clothing manufacturers; they usually buy in London at 30 days, or on drafts of 30, 60, or 90 days after sight of documents or goods. The distributing houses, drapery stores, or small users buy from the importing warehousemen in the large cities, who give any credit from one month to nine, renewing bills from time to time, and charging, say, 7 or 8 per cent for the accommodation, while in drought years, and sometimes, also, in good seasons, they hold liens over the stocks of the drapery stores. There are only two button jobbers in Melbourne and their imports are not considerable, as their chief business is in bankrupt or assigned stocks.

In ordinary small lines, such as pearl buttons, men's brace buttons, metal and bone, and common goods, styles in Australia do not alter much. In the higher grades, however, of bone (large), composition, fine metals, celluloid, etc., there are different ranges specially made for winter and summer wear, and these change every season, so that new ranges of samples are submitted to wholesale buyers in London twice annually—summer buttons about October and November, and winter buttons April and May. At any time large buttons may go out of fashion, and such a change is now expected, large buttons having been in favor for four years.

The fashions are so precarious that the Australian importers will buy sparingly, say April to July, and will let these shipments reach their Australian houses and be actually tested in stock on the market. The importers will then cable London for further immediate supplies of such patterns as have proved to be favorites with their customers.

Several conditions are necessary to successful trade in this market:

(1) The manufacturers must be prepared to submit good ranges of both summer and winter buttons at the proper seasons. Unlimited ranges of designs are not desirable, but about 20 to 30 patterns of high-price goods and the same number of goods at, say, 40 per cent less. This latter range represents the bulk of the imports.

(2) The manufacturer must be able to supply cabled orders in full, both as to designs and quantities, at short notice.

(3) In view of the failure of some of these goods from America in the past, he must be prepared to guarantee the quality of his stock. It is a serious thing for a warehouseman at the opening of the season to find his stock unsalable through faults and failures in the manufacturing of same, and it is poor consolation to him to ship the goods back to New York, for, even though the cost is refunded, he is destitute of the stocks for the season. This market being so far distant from America, a cabled order occupies three to four months in delivery.

(4) Buyers generally, and especially buyers of largest volume, will not buy through New York export houses, but insist on buying direct from the manufacturer, he to draw on them 30 days after sight of goods, when, if the latter open up in good quality, he will accept the draft, and if not, he will decline it and leave the goods on the hands of the bankers presenting the draft. A few buyers may buy on the terms of, say, sight draft or 30 or 60 days.

Parisian and London tailors are not represented by agents in Australia. Tailors engaged exclusively in the manufacture of women's clothing are not numerous. The principal dry goods stores, known here as drapery, or soft goods stores, have extensive tailoring departments for both women and men. They use and sell the great bulk of the buttons, except such as are used by the larger manufacturers (department stores) who, in most cases, import their own and retail to the general public.

HOBART, TASMANIA.

Consul W. A. Bickers.

Buttons of the same classes used in the United States find a ready sale in Tasmania. Celluloid and metal buttons used for trimming women's dresses constitute probably 65 per cent of all buttons used, and they come in a great variety of shapes, sizes, and colors—often are multicolored, though there is no effort made to harmonize the buttons with the pattern of the cloth. Ordinary bone and ivory-nut buttons such as are used on men's suits, overcoats, and women's tailored suits are in good demand and amount to about 20 per cent of the domestic trade. Pearl shell buttons amount to about 10 per cent. Of other types the covered button predominates; these buttons are bought covered and no particular efforts are made to match unusual patterns of cloth.

As to the volume of the button trade it is impossible to give any reliable figures, as there is no local production and very few buttons are imported direct from foreign countries (such imports are valued at less than $1,000 per annum). The greater part of the supply is obtained from dealers in Melbourne, of which transactions no records are kept by the customs authorities. Tasmania has, however, 200,000 population, and the demand for all kinds would approximate the demand of an equal number of people in the United States except for celluloid and metal buttons for trimming women's dresses. Buttons of these kinds are used far more freely than in America. As to the origin of imports, Germany was the most important source of supply before the war and large quantities of German buttons are still on the market. Since the cessation of German imports England has been the most important source of supply, though Japanese buttons are finding their way here. At first the English button was not satisfactory on account of the indifferent coloring, but it seems that this difficulty has been overcome and the colors are now equal to those formerly obtained from Germany. There is no export trade in buttons.

The present competition to be met by American buttons would be from England and Japan, and for American buttons to find an appreciable market here would be merely a question of price. The usual styles offered on the American market should prove satisfactory here.

As already stated, practically all buttons are secured from jobbers and wholesale dealers in Melbourne. This is very natural under the circumstances, as trade connections between Melbourne and Tasmania are very close, and there are very few retail merchants here who have such a volume of trade in this line as to justify them in buying direct from foreign sources. Three firms engaged in the wholesale textile business carry buttons as a side line, but even they generally secure their supplies from Melbourne, and up to the present time there have been no local agents in this business, though recently an agency business was established here which would be pleased to consider a strictly agency proposition. Naturally, as the merchants secure their supplies from parties in Melbourne, who are well posted in regard to the credit of the various local firms, terms would vary, but open book accounts are very freely given.

NEW ZEALAND.

Consul General Alfred A. Winslow, Auckland.

The supply of bone and that class of buttons came very largely from Austria before the war, while the pearl and shell buttons came principally from Italy, France, and Japan, with Italy in the lead. Now the United States and England supply most of the bone and that class of buttons, with the United States well in the lead, largely because the English manufacturer is unable to fill orders. Italy and Japan now supply most of the pearl and shell buttons, with Japan rapidly gaining on Italy. The American white pearl buttons shown did not measure up well with either the Italian or Japanese, and there was also complaint about the price and the style of mounting, but the colored pearl button from America is quite popular and a good seller for certain lines. Metal buttons come very largely from England and the United States, the latter gaining rapidly on England, with still quite a margin that can be taken over by judicious hustling.

There are no buttons manufactured in New Zealand, but no statistics of imports were obtainable. They enter free of duty and are classified with haberdashery, consisting of buttons, tapes, pins, needles, and wadding, amounting in all to $281,537 for 1913, against $226,282 for 1912.

Buttons are bought principally through indent agents, save in cases where the importer has a New York agent, which is not a common thing as yet, though several of the leading retail and wholesale merchants are arranging for such a representative. The indent agent generally arranges to pay cash against documents at port of shipment, or to have the exporter draw against documents at port of shipment at sight or 30, 60, or 90 days. Sixty-day drafts are the most general, since it gives the importer time to turn himself to better advantage, and is the general time given by the European seller. Most of the indent agents are also prepared to pay cash against documents at port of delivery, but will favor the manufacturer or exporter who concedes 30 or 60 days.

According to the best information at hand, it would seem that most can be expected through the indent agents, for the active indent agent goes out after business in earnest. It would be well, however, to work the other channels to create a demand. Propaganda work is necessary to push American goods in this field.

There are but few wholesale houses in the country that carry buttons, other than clothing manufacturers, who generally have a jobbing department to supply the trade. In general these clothing manufacturers carry full lines and are well prepared to meet the demands.

UNPUBLISHED CONSULAR REPORTS.

Reports from the following consulates were received in the series composing this pamphlet, but have not been published. These reports will be loaned by the Bureau of Foreign and Domestic Commerce to persons who desire to consult them.

NORTH AMERICA.

Canada:
  Calgary.
  Charlottetown.
  Cornwall.
  Fernie.
  Fort Erie.
  Fort William and Port Arthur.
  Halifax.
  Kingston.
  Moncton.
  Niagara Falls.
  Orillia.
  Prescott.
  Sherbrooke.
  Sarnia.
  Sault Ste. Marie.
  St. John, New Brunswick.
  St. Stephen.
  St. Pierre-Miquelon.
  Sydney.
  Victoria.
  Yarmouth.
Mexico:
  Ensenada.
  Mazatlan.
  Nogales.
West Indies:
  Cienfuegos, Cuba.
  Curaçao, Dutch West Indies.

CENTRAL AMERICA.

Honduras: Ceiba.

SOUTH AMERICA.

Chile: Punta Arenas.
Venezuela: Puerto Cabello.

EUROPE.

Austria-Hungary: Fiume.
Belgium:
  Ghent.
  Liege.
France:
  La Rochelle.
  Nice.
  Reims (Epernay).
  St. Etienne.

EUROPE—continued.

Germany:
  Brunswick.
  Coburg.
  Nuremburg.
Greece: Patras.
Italy:
  Catania.
  Milan.
  Rome.
Spain:
  Jerez de la Frontera.
  Valencia.
Switzerland: Berne.
United Kingdom:
  Dunfermline.
  Hull.
  Liverpool.
  Newcastle.
  Plymouth.
  Sheffield.
  Southampton.
  Gibraltar.

ASIA.

Ceylon: Colombo.
China:
  Antung.
  Changsha.
  Foochow.
  Hankow.
  Nanking.
  Swatow.
Japan:
  Nagasaki.
  Seoul.
  Taihoku.
Siam: Bangkok.
Turkey:
  Bagdad.
  Diarbekir.

AFRICA.

Algeria: Algiers.
British East Africa: Mombasa.
Liberia: Monrovia.
Morocco: Tangier.

OCEANIA.

Australia: Newcastle.

BUTTON DEALERS AND IMPORTERS.

NORTH AMERICA.

CANADA.

CALGARY.

Wholesale dry goods:
- W. R. Brock Co. (Ltd.).

Retail button dealers:
- Hudson's Bay Co.
- Glanvilles (Ltd.).
- Snells.
- Binning & Co.
- Imperial Dry Goods Co.

EDMONTON.

Wholesale dry goods:
- Greenshields (Ltd.).

Retail button dealers:
- Hudson's Bay Co.
- Revillon (Ltd.).
- James Ramsey (Ltd.).

FERNIE.

Button dealers:
- Crows Nest Trading Co.
- Trites Wood Co.

HALIFAX.

Wholesalers:
- J. & M. Murphy (Ltd.), Hollis St.

Women's tailors (principal local button trade):
- E. Beckford & Co., 89 Agricola St.
- Cameron & Kent, 41 Gottingen St.
- Alfred DeNigris, 122 Hollis St.
- Miss H. Durant, 85 Barrington St.
- Stanford & Co., 156 Hollis St.

KINGSTON.

Button dealers:
- Macnee & Minnes, wholesalers.
- R. Waldron.
- Steacy & Steacy.
- J. Laidlaw & Son.
- Newman & Shaw.

MONCTON.

Dry goods:
- Peter McSweeney Co. (Ltd.).
- J. D. Creaghan Co. (Ltd.).
- R. N. Wyse.
- John O'Neil.
- W. F. Ferguson

MONCTON—Continued.

Tailors:
- J. J. McDonald & Co., 19 Botsford St.
- J. D. LeBlanc.
- Murdock McLeod, jr.
- E. C. Cole & Co. (Ltd.).
- F. W. S. Colpitts.

MONTREAL.

Manufacturers:
- American Button Co., 789 Henry Julien St.
- Dominion Button Works, 722 Visitation St.
- Montreal Button & Buttonhole Maker, 902 St. Lawrence.
- Moulton Manufacturing Co. (Ltd.), 236 Craig St. E.
- Royal Embroidery Works, 243 Bleury St.
- T. P. Tansey, 186 Peel St.
- Dominion Cord & Tassel Co., 505 St. Paul St.

Agents and wholesalers:
- W. R. Brock Co. (Ltd.), 230 Notre Dame W.
- Eagle Button Co., 45 St. Alexander St.
- Greenshields (Ltd.), 17 Victoria Sq.
- The Klotz Co., Sommer Building.
- M. Markus & Co., 215 Notre Dame W.
- Alphonse Racine (Ltd.), 340 St. Paul St.
- E. J. Scott & Co., 59 St. Peter St.
- Voss & Stuffman (Ltd.), 12 St. Helen St.
- Walker Buttons, 40 Dufferin Sq.
- Dominion Cord & Tassel Co., 505 St. Paul St.
- Glassford Bros., 70 St. Antoine St.
- E. H. Horne & Co., 30 St. François Xavier St.
- P. E. Pope & Co., Jacobs Building.

OTTAWA.

Wholesale button dealers:
- John M. Garland, Son & Co., 138 Queen St.
- J. G. Whyte & Son, 60 Rideau St.

NORTH AMERICA—Continued.

CANADA—Continued.

OTTAWA—Continued.

Clothing factories:
Grant, Holden & Graham (Ltd.).
Smart-Woods (Ltd.), Hull, P. Q.
Mackenzie (Ltd.).
Ringrose Bros.

Department stores:
Bryson-Graham (Ltd.), 142 Sparks St.
A. A. Fournier (Ltd.), 323 Wellington St.
Murphy-Gamble (Ltd.), 118 Sparks St.
Chas. Ogilvy (Ltd.), 126 Rideau St.
L. N. Poulin (Ltd.), 156 Sparks St.
A. E. Rea Co. (Ltd.), Rideau St.
Faulkner (Ltd.), 290 Dalhousie St.

QUEBEC.

Wholesale dry goods and notions:
Thibodeau Frère & Cie., 41–43 Dalhousie St.
Garneau (Ltd.), 71 Dalhousie St.
McCall, Shehyn & Co., 52 St. Peter St.
Gauvreau, Beaudry & Co., 48 St. Peter St.
Wm. McLimont & Sons, 71–73 St. Peter St.
Germain Belanger, 17–19 St. Peter St.

Notions:
Jos. Amyott & Fils, 45 Dalhousie St.
Remillard, Rinfret & Lefebvre, 6–8 St. Joseph St.

ST. JOHN, NEW BRUNSWICK.

Dry goods:
Brock & Paterson (wholesale), King St.
Vassie & Co. (wholesale), King St.
Manchester Robertson Allison, King St.
Macauley Bros. & Co., King St.

Tailors' supplies:
Le Baron Wilson, Germain St.
Horace Brown, Germain St.
Butt & McCarthy, Germain St.
A. R. Campbell & Son, Germain St.
D. & J. Patterson, Germain St.
A. Gilmour & Co., King St.
Mark Fisher, Germain St.

TORONTO.

Jobbers and wholesalers:
Greef-Bredt Co., 62 Front St. W.
W. P. White, 65 Simcoe St.
Gordon, MacKay & Co., 48 Front St. W.
W. R. Brock & Co., 68 Bay St.
John Macdonald & Co., 21 Wellington St. E.
A. Weyerstall & Co., 145 Wellington St. W.

TORONTO—Continued.

Department stores:
T. Eaton Co., 190 Yonge St.
Robert Simpson Co., 176 Yonge St.
Murray-Kay Co., 17 King St. E.

VANCOUVER.

Wholesalers:
Mackay Smith Blair & Co. (Ltd.), 206 Cambie St.
Gault Bros., 361 Water St.
Jas. Thomson & Sons (Ltd.), 353 Water St.
Johnston Bros. (Ltd.), 340 Cambie St.

Button dealers:
A. R. McFarlane, 318 Homer St.
H. E. Walker, 318 Homer St.
Malcolm Co. (Ltd.), 318 Homer St.

Women's tailors:
American Ladies' Tailors, 303 Hastings St. W.
Carsten's Goldstone (Ltd.), 106 Homer St.
Famous Ladies' Tailoring Co., 657 Granville St.
Ladyware Co. (Ltd.), 632 Granville St.
J. Mann & Co., 113 Hastings St. W.
Western Cloak & Suit Co., 1200 Homer St.

VICTORIA.

Wholesale dry goods:
Greatorex Bradbury & Co., 1406 Broad St.
A. H. Hartley, 1113 Langley St.
Moses Lenz, 527 Yates St.
James Thompson & Son, 1109 Langley St.

Retail dry goods:
David Spencer (Ltd.), View and Broad.
Victoria West Dry Goods Store, 310 Edwards, V. W.

Overall manufacturers:
Turner Beeton & Co., 1282 Wharf St.

WINNIPEG.

Wholesale button dealer, representing foreign manufacturers:
S. Groff & Sons, 290 McDermot Ave.

Wholesale dry goods:
Brock Co. (Ltd.).
Gaults (Ltd.).
Greenshields (Ltd.).
McIntyre Son Co. (Ltd.).
Robinson, Little & Co.
Stobarts (Ltd.).
R. J. Whitla & Co.

Overall manufacturers:
Henderson Manufacturing Co.
Union Overall Co. (Ltd.).
Western King Manufacturing Co.
Western Shirt & Overall Manufacturing Co.

NORTH AMERICA—Continued.

MEXICO.

AGUASCALIENTES.

- Wholesalers (men's and women's clothing):
  - Leautaud Hermanos, "Las Fabricas de Francia."
  - Ismael Romo, "La Perla."
- Retailers:
  - Arturo N. Leal, "El Gallo" (men's and women's clothing).
  - Testamentaria Ocampo, "La Universal" (men's and women's clothing).
  - Enrique Gonzales, "La Nacional" (shoe buttons).
  - Eduardo Acevedo, "El Borcegui" (shoe buttons).
  - A. Ruiz de Chavez, "La Union" (shoe buttons).
  - Regino Amador, "La Reforma del Comercio" (women's clothing).
  - Pedro A. Martinez, "Las Novedades" (women's clothing).
  - Samson Hermanos, "El Trebol" (women's clothing).

DURANGO.

- Importers:
  - Lombard Hermanos (dry goods, French).
  - Bourillon, Jacques y Cia. (dry goods, French).
  - Peters y Cia (hardware, German).

GUADALAJARA.

- Importers, wholesalers, and retailers:
  - Merceria y Ferreteria, "La Palma."
  - "Las Fabricas de Francia."
  - Merceria y Ferreteria, "La Paloma."
  - "La Ciudad de Mexico."
  - "La Ciudad de Paris."
  - E. Lebre & Co.

MAZATLAN.

- General importers, wholesale and retail button dealers:
  - Melchers Sucs.
  - Wohler Bartning Sucs.
  - Victor Patron.
  - Luis Reynaud (general importer).
  - G. Drakato (tailor).
  - A. R. Peña (men's furnishing).
  - José Naves (men's furnishing).
  - H. Claisse (retail).

MONTEREY.

- Importers:
  - M. Cirilo y Cia. (dry goods).
  - M. Cantu Trevino Hnos. Sucs. (dry goods).
  - J. Rosemblueth (dry goods).
  - Simón Picard y Hnos. (dry goods).
  - Streit y Ruiloba (tailors).
  - "La Moderna" (clothing factory).

MONTEREY—Continued.

- Importers—Continued.
  - Langstroth Sucs. (hardware).
  - J. Cramm y Cia (hardware).
  - C. Holck y Cia. (hardware).
  - J. M. Pansza y Cia. (hardware).

SAN LUIS POTOSI.

- Dry goods:
  - "La Exposición," Apartado 273.
  - "La Bohemia," Ramon Arbide.
  - "La Primavera," Leopoldo Gutierrez y Hno.
  - "Ciudad de Londres," Apartado 45.
  - "Al Puerto de Vera Cruz," Apartado 192.
- Tailors:
  - "Las Novedades," Apartado 195.
  - "The New England," Apartado 210.
  - F. A. Osario y Hno., 7 Morelos No. 53.
  - Genaro y Ernesto Espinosa, 9 Morelos No. 63.
- Notions:
  - Merceria La Gran Barata, Apartado 272.
  - Merceria Gran Rosario, Calle Morelos.
  - Merceria Mexicana, Frente al Correo.
- Clothing:
  - "La Cruz," Zavala Hnos. (workmen's clothing).
  - "El Surtidor," Apartado 326.
  - "La Industrial," 4 Galeana No. 20 (workmen's clothing).
- Silk and millinery:
  - "La Tosca," 2 Centenario, Letra C.

TORREON.

- Importers:
  - J. Goodman Estate (department store, American).
  - "Puerto de Veracruz" (dry goods, Mexican).
  - Torreon Clothing Co. (tailors, American).
  - Vda. de E. Coblentz (dry goods and tailoring, Mexican).
  - Ricardo Zaldo (dry goods, Mexican).
  - "Fábricas de Francia" (dry goods, French).

ZACATECAS.

- Wholesalers (men's and women's wear):
  - Enrique Aubert.
  - Agustin Jacques Sucs.
  - Jose Maria Viadero, S. en C.
  - "El Palacio Mercantil."
- Retailers:
  - Barcia y Gonzalez, "El Trebol" (men's wear).
  - Campuzano y Hno. (women's wear).

WEST INDIES.

BAHAMA ISLANDS.

Importer:
C. L. Lofthouse (dry goods), Nassau, New Providence.

BARBADOS.

BRIDGETOWN.

Department stores (direct importers):
Whitfield's.
D. Hope Rose (Ltd.).
Cave, Shepherd & Co.
R. H. Edwards.

BRIDGETOWN—Continued.

Department stores (direct importers)—Continued.
Da Costa & Co.
Harrison's (Ltd.).
J. R. Bancroft & Co.

BERMUDA.

HAMILTON.

Department stores:
Trimingham Bros.
H. A. & E. Smith.
T. J. Pearman & Sons.
Cox & Wilson.
Lockward & Co.
Hamilton Dry Goods Co.
C. F. Jones.

HAMILTON—Continued.

Tailors:
George C. Smellie.
William Smellie.
R. Roberts.
W. Darrell.

CUBA.

CIENFUEGOS.

Dry goods and silk wholesalers:
Rangel Novoa & Co.
Gomez Tarance y Schulz.
Gonzales y Garma.
Claret & Co.
Villar & Co.
Asensio y Puente.
J. Torres & Co.

HABANA.

Importers, who are also wholesalers and retailers:
Alvarez, Parajon y Cia., Ricla 91.
F. Blanco, Villegas 100.

HABANA—Continued.

Importers, who are also wholesalers and retailers—Continued.
Escalante, Castillo y Cia., Ricla 71.
Fernandez y Cia., Egido 2.
Fernandez y Sobrinos, Ricla 123.
Carlos Jordi, Obispo 106.
G. M. Maluf, Monte 15 (Syrian trade).
Martinez, Castro y Cia., Muralla 44.
Prieto Hnos., Muralla 96.
Schechter y Zoller, Muralla 58.
Solis, Hno. y Cia., Galiano y San Rafael.
Suarez y Rodriguez, Muralla 77.

DOMINICAN REPUBLIC.

MONTE CRISTI.

Wholesalers and retailers with tailoring department:
Julio Grullon.
José Isidor.
Lembcke & Co.

PUERTA PLATA.

Wholesalers and retailers with tailoring departments:
Antonio Barrera.
Divanna, Grisolia & Co.
Nacif P. Hache y Hnos.
Pappaterra Hnos.
Julio Simon & Co.
V. Vinelli & Co.

SANCHEZ.

Wholesalers and retailers with tailoring departments:
M. de Moya, Hijo & Co.

SANTIAGO.

Wholesalers and retailers with tailoring departments:
R. J. Espaillat & Co.
Sinesio Sahdala.
Manuel de Jesus Tavarez.
V. F. Thomen.

WEST INDIES—Continued.

HAITI.

PORT AU PRINCE.

Importers:
- Oloffson, Lucas & Co.
- Roberts, Dutton & Co.
- P. E. Painson.
- Gaston Revest.
- Reinbold & Co.
- R. Brouard.
- Auguste Gabriel.
- Edward Gabriel.
- Simmonds Frères.

PORT AU PRINCE—Continued.

Importers—Continued.
- Philip Carlestroem.
- Remy Bastien.
- A. & E. Boutin.
- A. L. Guerin & Co.
- H. & A. Stecher.
- E. Robelin.
- Michel Velten.
- Nicolas Cordasco.

JAMAICA.

KINGSTON.

Agents for foreign manufacturers:
- Bryden & Evelyn.
- William Wilson.
- N. C. Henriques.
- Reuben & Allen.
- Bonitto Brothers.
- David Aaron.
- Harold Solomon.

KINGSTON—Continued.

Wholesalers:
- C. M. DaCosta.
- A. O'R. King.
- E. R. Mordecai.
- E. A. Issa & Bro.
- The Issa Commercial Co.
- Nathan & Co.
- E. C. D'Azevado.
- Lopez & Co.

MARTINIQUE.

FORT DE FRANCE.

Cotton goods:
- A. Dolivet, 96 Rue Antoine Siger (branch of Paris house).
- Mme. U. Forbes, 43 Rue Antoine Siger.
- L. Hauer et Cie., 84 Rue Antoine Siger (branch of Paris house).
- Gabrielle Migerel, 92 Rue Antoine Siger.

FORT DE FRANCE—Continued.

Cotton goods—Continued.
- Molinard et Fils Ainé, Rues Antoine Siger et Schoelcher (branch of Paris house).
- E. Reynard, 48 Antoine Siger (branch of Paris house).
- Valbrun, 60 Rue Antoine Siger.

TRINIDAD.

PORT OF SPAIN.

Department stores:
- Smith Bros. & Co.
- Stephens Stores (Ltd.).
- Trinidad Stores.
- Skeoch & Co.
- Miller's Stores (Ltd.).
- M. P. Maillard.
- J. Glendinning & Co.
- Richardson & Selway.

PORT OF SPAIN—Continued.

Department stores—Continued.
- C. W. Henderson.
- A. Vaughan.
- A. A. Waterman.

SAN FERNANDO.

Department stores:
- W. A. Bonyon.
- J. Dalgleish & Co.

CENTRAL AMERICA.

BRITISH HONDURAS.

BELIZE.

General merchants:
- James Brodie & Co.
- Hofius & Hildebrandt.
- The Belize Stores.

BELIZE—Continued.

General merchants—Continued.
- Meyer, Usher & Co.
- Krug & Co.
- John Harley & Co.

CENTRAL AMERICA—Continued.

COSTA RICA.

PORT LIMON.

- Importers:
  - The United Fruit Co., merchandise department (American purchasing agents at their offices at 17 Battery Pl., New York, and 131 State St., Boston).
  - W. Steinvorth y Cia (American purchasing agent, A. A. Lindo Co., 1 Broadway, New York).
  - Edgar Knohr Cia. (American purchasing agent, G. Amsinck & Co., Hanover St., New York).
  - Breedy & Co., fancy dry goods and shoes, retail (no regular purchasing agents abroad).

SAN JOSE.

- General wholesale jobbers:
  - W. Steinvorth y Hermano.
  - T. Assmann y Cia.
  - Basigó y Alvarado.
  - Pages Hermanos.
  - Juan Knohr Hijos.
  - Edgar Knohr y Cia.
  - R. Cañas y Cia.
  - Pages y Cia.

SAN JOSE—Continued.

- Wholesale and retail importers.
  - M. N. Esquivel Hijos.
  - F. Romero y Cia.
  - José Esquivel.
  - Robert Hermanos.
  - Gabriel Vargas.
  - A. Herrero y Cia.
  - Herrero y Gil.
  - Herrero Hermanos.
- Merchant tailors, direct importers:
  - Robert Hermanos.
  - Alberto T. Brenes.
  - Juan Valenzuela.
  - Herrero Hermanos.
  - Scaglietti Sobrinos.
  - Montero e Hijo.
  - J. Alleyne Belgrave.

CARTAGO.

- Importers:
  - Nicolas Casasola.
  - Rivera Hermanos.

PUNTA ARENAS.

- Importers:
  - José Chen Apuy.
  - Jacobo Sánchez.
  - Julio Roquet.

GUATEMALA.

ANTIGUA.

- General merchandise:
  - Matheu Hnos.
  - José Maria Antillon.
  - Sebastian del Pinal.
  - Federico Putzeys.

COATEPEQUE.

- General merchandise:
  - Maximo Stahl & Co.
  - Laeisz & Co.
  - Antonio G. Hong & Co.
  - Adolfo Chang.

COBAN.

- General merchandise:
  - Dieseldorff & Co.
  - Francisco Mathies.
  - Thomas Hnos.
  - Rodolfo Brockmeyer.

GUATEMALA CITY.

- Dry goods:
  - E. Ascoli & Co.
  - Samuel Ascoli & Co.
  - Maegley & Co.
  - Federico Koper & Co.

GUATEMALA CITY—Continued.

- Dry goods—Continued.
  - Mauricio Zadik.
  - Taussig & Liebes.
  - Schwartz & Co.
  - Bauer & Co.
  - Ernesto Koller.
  - Maria Cobos de Arzu.
  - Juan Pierri.
  - Jesus Perez.
  - Maximo Hesse.
  - Schutte & Co.
  - A. Peyre & Co.
  - Noltenius & Co.
  - Julio Bilak & Co.
  - L. Guttman & Co.
  - Jacobo Engel & Co.
  - Stein & Armer (men's and women's tailor establishment attached).
- Chinese dry goods stores, makers of suits and uniforms:
  - Antonio Chang & Co.
  - Wo Hing & Co.
  - Quon Lee.
  - Ton San Lon & Co.
  - Gustavo Lou & Co.
  - Quon On Lon & Co.
  - Francisco Lou.
  - Luis Chang.

CENTRAL AMERICA—Continued.

GUATEMALA—Continued.

GUATEMALA CITY—Continued.

Men's furnishing goods, notions:
- D. Weissman & Co.
- Triebel & Co.
- Luis Ortega.
- Julio Palomo.
- David Rosenberg.
- Banninger & Co.
- Gustavo Oetiker & Co.
- José I. Juarez (shirt maker).

OCOS.

General merchandise:
- Man On Lon & Co.
- Kay On Lon & Co.
- Samuel Wolford.

PAJAPITA.

General merchandise:
- Buhl & Lange.
- S. Garcia.
- J. G. Martinez.

QUEZALTENANGO.

General merchandise:
- Laeisz & Co. (head office).
- E. Ascoli & Co. (head office for western Guatemala).
- Claudio Bornholt.
- Maegli & Co.
- Koeper & Bornholt.
- Schutte & Co.

RETALHULEU.

General merchandise:
- Laeisz & Co.
- Noltenius & Co.
- J. Lisser.
- Otto G. Augener.

SAN JOSE (PORT).

General merchandise:
- José F. Gil.
- Alberto Linares.
- Alfredo Cordero.
- Francisco Ma.

OTHER CITIES.

General merchandise:
- Obdulio Mere, Ayutla.
- Fernando Orellana, Chiquimula.
- Bernabé Gomar, Escuintla.
- Xavier Dutait, Escuintla.
- E. Ascoli & Co., Huehuetenango.
- Thiemer & Co., Livingston.
- Edward Barrascut, Mazatenango.
- Laeisz & Co., Mazatenango.
- United Fruit Co., Puerto Barrios.
- L. E. Tench, Puerto Barrios.
- Dieseldorff & Co., Salama, Baja Verapaz.
- Ernesto Boesche, Salama, Baja Verapaz.
- Herman Egli, San Antonio, Suchitepequez.
- Waldemar Thiemer, San Cristobal, Alta Verapaz.
- Guillermo Scheuffler, San Felipe, Retalhuleu.
- Bernardo Zurhellen, San Pedro Carcha, Alta Ver.
- Dieseldorff & Co., Senahu, Alta Verapaz.
- Kensett Champney & Co., Senahu, Alta Verapaz.
- Arnold Daetz, Tucuru, Alta Verapaz.

HONDURAS.

CEIBA.

General merchandise:
- J. Andonie y Hno.
- B. Bombace y Cia.
- Lorenzo Castillo.
- Juan N. Kawas & Co.
- E. & C. Maestra.
- Pizatti Hnos.
- A. Teixido y Hno.
- B. y S. Sikaffy.
- P. Devaux y Cia.
- N. Howell & Sons.
- Laffite, Alverez y Cia.
- Moises y Cia.
- L. Solis.
- Wm. N. Zuber.

PUERTO CORTES.

General merchandise:
- W. W. Pears.
- Louis Estape y Cia.
- A. Clerici.
- Cuyamel Fruit Co. (P. A. Whitney, Central Bank Building, New Orleans, La.).

ROATAN.

General merchandise:
- Cooper Bros.
- Litrico Hnos.
- J. M. McNab.
- Cooper & Warren.
- D. Warren & Sons.

SAN PEDRO.

General merchandise:
- Louis Caron.
- C. J. Warren & Co.
- P. Maier & Co.
- Bennaton & Co.
- Bueso Hnos.
- D. J. Larach y Cia.

TEGUCIGALPA.

Importers:
- Pablo Uhler y Cia.
- Santos Soto y Cia.
- D. Fortin.
- Quinchon, Leon y Cia.
- Antonio Ch. Waiss y Cia.
- N. Cornelsen.
- Juan Stradtmann.
- Banco de Comercio, Commercial Department.

CENTRAL AMERICA—Continued.

HONDURAS—Continued.

TELA.

General Merchandise:
- A. R. Elvir.
- S. Fernandez.
- United Fruit Co. (Merchandise Department).
- Esau Cooper.
- H. M. Field.

TRUJILLO.

General merchandise:
- A. & J. Glynn.
- A. Keiffer.
- Guillen & Dole.
- Melhado Sons.

OTHER CITIES.

General merchandise:
- J. Rossner & Co., Amapala.
- Ysidro Badia, Chaloma.
- Francisco Siercke, Choluteca.

NICARAGUA.

BLUEFIELDS.

General merchants, importing on own account:
- Belanger's (Inc.) (American agents, Belanger's (Inc.), 20 Broad St., New York City; also Metropolitan Bank Building, New Orleans, La.).
- Casa Alemana (American agent, Alfred V. Beer, 912 Canal-Louisiana Bank Building, New Orleans, La.).
- J. M. Cohn (Inc.) (American agent, J. M. Cohn (Inc.), 912 Canal-Louisiana Bank Building, New Orleans, La.).
- Quong Chong & Co.
- Tai Long & Co.
- Sun Sun Co.
- Samuel Weil & Co. (American agents, Samuel Weil & Co., Metropolitan Bank Building, New Orleans, La.).
- Wing Sang & Co.
- H. F. Salter & Co. (American agents, H. F. Salter & Co., 508 Iberville Street, New Orleans, La.).

CAPE GRACIAS A DIOS.

General merchants, importing on own account:
- Lehmann & Co. (American agent, Alfred V. Beer, 912 Canal-Louisiana Bank Building, New Orleans, La.).
- Von Kurnatowski & Asmussen (American agent, Alfred V. Beer, 912 Canal-Louisiana Bank Building, New Orleans, La.).

PEARL LAGOON.

General merchants, importing on own account:
- E. Brautigan & Co. (American agent, Alfred V. Beer, 912 Canal-Louisiana Bank Building, New Orleans, La.).
- Lamb, Muyo.

PRINZAPOLKA.

General merchants, importing on own account:
- Harrison, James (American agent, Alfred V. Beer, 912 Canal-Louisiana Bank Building, New Orleans, La.).
- La Luz y Los Angeles Cia. Minera (American agent, Alfred V. Beer, 912 Canal-Louisiana Bank Building, New Orleans, La.).
- Nicaragua Commercial & Logging Co.
- Saddy Bros. (American agent, Alfred V. Beer, 912 Canal-Louisiana Bank Building, New Orleans, La.).

RIO GRANDE.

General merchants, importing on own account:
- Rio Grande Supply Co.

CORINTO.

General merchants:
- Alfredo Papi.
- Juan Deshon.

CHINANDEGA.

General merchants:
- Santiago Callejas.
- M. Navarro & Co.
- José Mantica.
- Alberto López Cia.

GRANADA.

General merchants:
- Enrique Pineda.
- Simon Wolff & Co.
- Pellas & Horvilleur.
- Martin Benard.
- Cesar Hnos.
- Orontes Lacayo.
- Labern & Thompson.
- Roberto Martinez.

CENTRAL AMERICA—Continued.

NICARAGUA—Continued.

GRANADA—Continued.

General merchants—Continued.
- F. A. Pellas & Co.
- E. & J. A. Lacayo.
- Morales Hnos.
- Carlos Gomez & Hno.
- Francisco Brockmann & Co.
- Munkel, Muller & Co.

LEON.

General merchants:
- Salvador Cardinal & Co.
- Dionisio Villa V.
- Jorge Dreyfus & Co.
- Labern & Co.
- Domingo Salinas.
- Tomas Pereira.
- Cuan Chon Lon & Co.

MANAGUA.

General merchants:
- Labern & Thompson.
- Jorge Dreyfus & Co.
- Alcibiades Fuentes.
- Pellas & Horvilleur.
- Min Sun Lon & Co.
- Constantino Lacayo.
- Edmundo Bernheim.
- Cuan Chon Lon & Co.
- J. Elizondo e Hijos.

MASAYA.

General merchants:
- I. Cordoza y Hno.
- F. Z. Carrion e Hijos.
- Abraham Cardoza.
- Benjamin Abaunza.

MATAGALPA.

General merchants:
- A. C. Potter.
- Jorge Schmidt.

PANAMA.

COLON.

Retail merchants:
- Mueller Co. (branch of Panama house).
- Eisenmann & Eleta (branch of Panama house).
- American Bazaar.

Men's tailors:
- Skipper Bros. (branch of firm in Panama).
- Lum Yick Kum.

PANAMA.

Wholesalers:
- The Maduro Co.
- Heurtematte & Co.
- Cardozo Hnos.
- H. de Sola y Cia.
- Quelquejeu, Jimenez y Cia.
- S. L. Toledano e Hijos.
- F. C. Herbruger Co.
- Mahoney's Store.

PANAMA—Continued.

Retail dealers:
- Cardozo & Pereira.
- Eisenmann & Eleta.
- Piza, Piza y Cia.
- P. Oduber.

Tailors who import and sell buttons:
- B. Rodriguez.
- Cozarelli Hnos.
- Scippa Hnos.
- V. Rosania.
- N. Justiniani.

Dressmakers who import and sell buttons:
- Nina Mastellari.
- Julia H. de Paredes.
- The Misses Harris.
- Señora de Siva.
- Mrs. MacKay.

SALVADOR.

SAN SALVADOR.

Importers:
- Guillermo Levy y Hno.
- Carlos Bernheim (Paris Volcan).
- Dreyfus, May y Cia.
- Dreyfus, Schwab y Cia.
- Dreyfus Hnos.
- La Sara Dreyfus y Cia.
- M. & R. Cohn.

SAN SALVADOR—Continued.

Importers—Continued.
- Borghi, B. Daglio y Cia.
- H. de Sola y Cia.
- Walter de Sola y Cia.
- Andreta y Cia.
- Hasbun Hnos.
- Abdala Hasbun.
- Elias Dabub.

SOUTH AMERICA.

ARGENTINA.

BUENOS AIRES.

- Wholesale importers of buttons:
  - Arregui y Landfried, 901 Calle Alsina.
  - Bonduel Hnos., 807 Calle Victoria.
  - Luis Gaye y Cia., 902 Calle Victoria.
  - Faussett y Gonzalez, 970 Calle Victoria.
  - Pedro y Galileo Maurizi, 648 Calle Corrientes.
  - Segundo Fernandez y Cia., 38 Calle Maipu.
  - Viuda de Doublet y Hijos, 764 Calle Bme. Mitre.
- Importers of buttons and accessories for women's tailors and milliners:
  - L. Barbat, 989 Calle Viamonte.
  - Edgardo Levy y Cia., 816 Calle Viamonte.
  - F. Marty, 762 Calle Alsina.
  - Morand y Girard, 760 Calle Suipacha.
  - S. Sansoulet, 240 Calle Suipacha.
  - M. Toupet, 357 Calle Lima.
- Department stores:
  - Avelino Cabeza, 560 Calle Sarmiento.
  - J. Brun y Cia., 999 Calle Corrientes.
  - Gath y Chaves, 602 Calle Cangallo.
  - Cibrian Hnos. (Tienda San Juan), 801 Alsina.
  - Harrods (Ltd.), 977 Calle Florida (branch of London house).
  - Oliver, Albert, y Cia. (Tienda Ciudad de Mejico), 598 Calle Sarmiento.
  - Maison L. Adhemar, 901 Calle Cangallo.
  - Elias Romero y Cia., 902 Calle Bme. Mitre.

ROSARIO.

Except those which are branches of establishments in Buenos Aires, the following firms import direct from foreign sources:

- Department stores:
  - Gath y Chaves, San Martin, 751 (branch of Gath y Chaves, Buenos Aires).
  - Zamboni y Rey, Sarmiento, 843.
  - Cassini y Cia., San Martin, 898.
  - Castagnino Hnos. y Cia., San Martin, 1100.
- Tailors:
  - C. Layus, Cordoba, 1158.
- Dry goods and notions:
  - Lohmann, W., y Cia., San Lorenzo, 1049.
  - Fernandez, Roca y Cia., San Lorenzo, 1028.
  - Miller, Enrique, y Cia., Santa Fe, 1258.
  - Alonso, Felix, San Martin, 840.
  - Rodriguez, Lucas, Corrientes, 726.
  - C. R. Sherrer, Cordoba, 1134 (branch of C. R. Sherrer, Buenos Aires).
- Tailors' supplies:
  - Sanjurjo, Fernando, Cordoba, 1086 (branch of Fernando Sanjurjo, Buenos Aires).
  - Calcagno y Valerga, Sarmiento, 890.
  - Carrillo, Matias, Rioja, 1100.
  - Lozano, Salvador, Sarmiento, 988.
  - Pomes, José, San Martin, 946.
  - Strada, Pastore y Cia., Sarmiento, 1090.
- Clothing manufacturers who import directly:
  - Garcia Hnos., Cordoba, 1101.
  - Teran Hnos. y Cia., Cordoba, 1299.
  - Barbagelata y Drago, Sarmiento, 701 (branch of Barbagelata y Drago, Buenos Aires).
  - Casa Dell'Acqua, San Martin, 944 (branch of Casa Dell'Acqua, Buenos Aires).

BRAZIL.

BAHIA.

- Importers:
  - Guilherme de Carvalho e Ca., Praca Deodoro.
  - Souza, Teixeira e Ca., Rua Conselheiro Dantas.
  - Westphalen, Bach & Co., Rua da Louca.
  - Augusto de Carvalho e Ca., Rua das Princezas.

SOUTH AMERICA—Continued.

BRAZIL—Continued.

BAHIA—Continued.

Importers—Continued.

- João de Cunha e Ca., Travessa do Garapa.
- Fadigas e Irmão, Rua das Princezas.
- Pedreira, Lapa e Ca., Rua dos Algibebes.
- Henrique Ferreira Pontes, Rua Conselheiro Saraiva.
- Rodrigues Cardoso e Ca., Rua Conselheiro Saraiva.
- Sloper Irmãos, Rua Chili.

RIO JANEIRO.

Wholesale importers:

- Abrey, Renner e Ca., Avenida Rio Branco, 104.
- Barbosa, Varella e Ca., Rua da Alfandega, 76.
- Brito, Manoel Francisco de, Rua da Alfandega, 88.
- Bonniard e Ca., A., Rue da Alfandega, 92.
- Castro e Ca., Gomes de, Rua Visconde de Inhauma, 62.
- Coutinho e Ca., João Reynaldo, Rua Visconde de Inhauma, 53.
- Camache e Ca., Rua da Alfandega, 65.
- Carvalho e Ca., Mario de, Rua Theóphilo Ottoni, 24.
- Dantas e Ca., Silva, Rua S. Pedro, 86.
- Dantas e Ca., Freitas, Rua dos Ourives, 102.
- Ferraz e Ca., Y., Rua Marechal Floriano, 13.
- Ferreira, Antonio do Silva, Rua Theophilo Ottoni, 86–88.
- Ferreira, Balthazar e Ca., Rua da Alfandega, 81–83.
- Gomes de Castro e Nora, Rua Acre, 96.
- Gomes e Ca., Abilio, Rua dos Ourives, 97–99.
- Herm, Stoltz e Ca., Avenida Rio Branco, 66.
- Jardin e Ca., Azevedo, Rua da Alfandega, 49.
- Luckaus e Ca., Rua General Camara, 67.
- Medeires e Bittencourt, Rua da Alfandega, 58.
- Mattheis e Ca., Rua General Camara, 69.
- Mattos, Maia e Ca., Rua do Hospicio, 13.
- Meghe e Ca., Rua da Alfandega, 93.
- Ortigao e Ca., Vasco, Largo de S. Francisco.
- Oliveira, A. Ribeiro do, Rua Visconde de Inhauma, 115.

RIO JANEIRO—Continued.

Wholesale importers—Continued.

- Oliveira e Ca., J. A. do, Rua do Hospicio, 99.
- Pacheco e Ca., Costa, Avenida Rio Branco, 114.
- Pereira e Ca., Costa, Rua da Quitanda, 53–55.
- Pinheiro e Ca., Antonio da Silva, Rua da Alfandega, 113.
- Prejalwa e Ca., Rua da Alfandega, 70.
- Ramos Sobrinho e Ca., Rua do Hospicio, 11.
- Reis e Ca., Mattos, Rua General Camara, 82.
- Sotto Maior, Oliveira e Ca., Rua Theophilo Ottoni, 37.
- Sociedade Anonyma "Casa Raunier," Rua do Ouvidor.
- Souza e Ca., J. P., Avenida Rio Branco, 76–86.
- Serpa e Ca., Ferreira, Rua da Quitanda, 89.
- Silva e Ca., Carvalho, Rua da Alfandega, 66.
- Uslaender e Ca., Victor, Rua Primeiro de Marco, 112–114.
- Soares e Ca., J. C., Rua do Hospicio, 94.
- Vaz e Ca., Augusto, Rua da Alfandega, 53.,
- Vieira Soares e Ca., Rua da Quitanda, 159.
- Wahle e Ca., Janowitzer, Rua da Candelaria, 49.

Importers, with retail departments:

- Alfaiataria Brandao, Avenida Rio Branco, 102, 1° andar.
- Alfaiataria Vieira, Avenida Rio Branco, 106, 1° andar.
- Bastos e Ca., Coelho, Rua des Ourives, 44.
- Bastos e Castro, Rua Gonçalves Dias, 16.
- Cooperativa Militar do Brazil, Avenida Rio Branco, 255.
- Casa Colombo, Sociedade Anonyma, Rua do Ouvidor.
- Der e Ca., Rua do Ouvidor, 182.
- Fernandes e Ca., Douviz, Rua do Ouvidor, 140.
- Ferreira dos Santos e Ca., Rua do Ouvidor, 92.
- Gerin e Ca., Luiz, Rua Sete do Setembre, 105.
- Guimarães e Ca., N. Rua Luiz Camoes, 16.
- Goncalves Irmãos, Rua Sete do Setembre, 165.
- Freitas e Ca., Barbosa, Avenida Rio Branco, 136.

SOUTH AMERICA—Continued.

BRAZIL—Continued.

RIO JANEIRO—Continued.

- Importers, with retail departments—Continued.
  - Garcia e Ca., A. J., Avenida Rio Branco, 93–97.
  - Gaspar e Medeires, Praça Tiradentos, 18.
  - João Ratto, Rua Goncalves Dias, 57.
  - Leitão Irmãos e Ca., Largo do Santa Rita, 4.
  - Nascimento, Miguel, Rua do Ouvidor, 167.
  - Pinto, A., Rua do Ouvidor, 169.
  - Queiroz, Pedro S., Avenida Rio Branco, 143.
  - Rabello e Ca., Almeida, Rua Uruguayana, 96.
- Commission houses:
  - American Trading Co., Rua do Rosario, 90, 1° andar.
  - Baker e Diaz, Rua do Hospicio, 49, 1° andar.
  - Herm, Stoltz e Ca., Avenida Rio Branco, 66.
  - Wahle e Ca., Janowitzer Rua da Candelaria, 49.
  - Kramer e Ca., Rua do Hospicio, 21.
  - Nogueira e Garriga, Rua da Alfandega, 109, 1° andar. (New York agent, S. Alfred Bennett, 34 Pine Street.)
  - Theodor Wille e Ca., Avenida Rio Branco, 79.

SÃO PAULO.

- Manufacturers:
  - Moraes e Mello, Rua Guayouru No. 26.
  - Fabrica de Botões de Osso, Agua Branca (bone buttons).
- Importers:
  - Block Freres e Ca., Rua Direita, 4.
  - M. V. Levy Freres, Rua Florencio d'Abreu.
  - J. Metri, Rua da Quitanda.
  - Casa Ottomana, Rua 25 de Marco, 293.
  - Araujo, Costa e Ca., Rua Boa Vista.
  - Martins, Costa e Ca., Rue Jose Bonifacio.
  - Irmãos Bertollocci, Rua General Garneiro.
  - Irmãos Berti e Ca., Rua General Garneiro.
  - Mello Polenitz e Ca., Rua José Bonifacio.
  - Durville e Ca., Largo do Ouvidor.
  - Augusto Rodrigues e Ca., Rua S. Bento.
  - Couto e Ca., Rua José Bonifacio.
  - Lima e Ca., Rua General Garneiro.
  - Casa Allema, Rua Direita (better lines only).
  - Mappin Stores, Rua 15 de Novembro (better lines only).

BRITISH GUIANA.

GEORGETOWN.

- Commission agents:
  - Webb Bros.
  - Macfarlane & Macbeth.
  - Fred J. Bankart & Co.
- Dry goods:
  - Wm. Fogarty (Ltd.).
  - Booker Bros., McConnell & Co. (Ltd.) (tailoring also).
  - Bettencourt & Co. (Ltd.).
  - Santos, DeCairos & Co. (Ltd.).
  - Smith Bros. & Co. (Ltd.) (tailoring also).

GEORGETOWN—Continued.

- Dry goods, retail only:
  - Flett, Smith & Co.
  - Ferreira & Gomes.
  - J. T. Valladares & Co.
  - J. H. Gomes & Co.
  - S. Davson & Co. (Ltd.), New Amsterdam, B. G.
- Tailoring establishments:
  - The Excelsior Tailoring Establishment.
  - M. N. Rieck.

CHILE.

ANTOFAGASTA.

- Tailors:
  - Nicolas Nuñez.
  - Fernando Garcia.
  - D. Molina e Hijo.
  - Carlos Ther.
  - Aurelio Liendo.
  - T. Arce y Cia.
  - J. Espinosa y Gonzalez.

ANTOFAGASTA—Continued.

- Notions and dry goods:
  - Miguel Giacaman y Hno.
  - Salvador David.
  - Elias Marcos Hnos.
  - Fernandez y Carril.
  - José Herreros.
  - Carlos A. Mudanar.
  - Jacquès Cere.

SOUTH AMERICA—Continued.

CHILE—Continued.

ANTOFAGASTA—Continued.

Notions and dry goods—Continued.
- Raimundo Garcia.
- Abdon Barraza.
- Miguel Placido de Yacoman.
- Moises Abraham.
- Juan de D. Carmona.
- Coronata Hnos.
- Gattas Said Hnos.
- Antonio Aguirre.
- Manuel Becerra.
- Gutierrez Hnos.
- Hernandez y Sanchez.
- Manuel Santos.
- Sobera y Eyzaguirre.

IQUIQUE.

Tailors:
- Solari Hnos.
- Valls y Cia.
- Suner Mora y Cia.
- A. Richard.
- Pirretas y Cia.

Clothing and notions:
- Blas Arata.
- A. Mazzei & Co.
- Abadia Marro y Marquez.
- Domingo Sacco.
- Carlos Grasso.
- Coronatta Hnos.
- Noziglia Hnos.
- J. Malagarriga.
- Suc. de Pessolo y Canesa.
- Ramon Hidalgo.
- Cuneo Hnos.
- A. Zerega.

SANTIAGO.

Francisco Bouhon, Compañia, 1001 (wholesale and retail tailors' supplies).
Gath y Chaves, Estado esquina Huerfanos (department store).
Botoneria y Cardoneria Alemana, Calle Huerfanos (wholesalers, German).
Katz, Brenner & Co., "Santo Domingo," Catedral, 1060 (women's buttons, buyer in Europe).
John Melrose & Co., Ahumada, 137 (women's fancy buttons).
H. Sutherland & Co., Casilla, 1079 (pearl buttons).
Maisonnave y Cia., Bandera, 547 (shoe buttons).
José Pio Cabrera, Gerente, Sociedad Cooperativa Militar, Agustinas esquina Ahumada (military buttons).
Casa Arditi, Agustinas, 809 (French, tailors' supplies).
F. & W. Hardt, Agustinas, 942 (German, wholesale).
Enrique Nieto y Cia., Rosas, 1060 (Spanish, wholesale).
Timmermann y Cia., Monjitas, 831 (German, wholesale).
Casa Muzard, Moneda, 157 (women's supplies).
Zulueta Hnos. y Cia., San Pablo, 1037 (Italian, cheaper grade buttons).
Casa Francesca, Estado esquina Huerfanos (French department store).

VALPARAISO.

Wholesale dry goods, tailors' supplies, and buttons:
- J. F. Fluhmann, Calle Serrano.
- Timmerman & Co., Brazil, 153.
- Hardt, E. y W., Blanco, 625.
- Nieto y Cia., S. Donoso.
- E. Nieto y Cia., S. Donoso.
- Nieto, Codina y Cia., Blanco, 1005 (also operate clothing factory and shirt factory at Santiago).
- Miguel Cariola, Brazil, 834.
- Macqueen & Co., Blanco, 775.
- W. R. Grace & Co., Prat, 45.

Department stores:
- Casa Francesa, Calle Condell, Yerbas Buenas.
- Casa Muzard, Calle Condell, 371.
- Tomas Riddell y Cia., Calle Esmeralda, 105.
- Otto Jacobson, Calle Esmeralda, 19 (specializing in ladies' clothing).

Shoe buttons and findings, wholesale:
- Maisonnave & Co., Tivola, 75.

Dry goods and tailors' supply houses which might be interested in buttons:
- Grote & Co., Esmeralda, 47.
- Winkelhagen, Luck & Co., Blanco, 717.
- Hagnauer & Co., Blanco, 527.
- Weber & Co., Blanco, 607.
- Luis Guevara y Cia., Brazil, 147.
- Lange y Cia., Brazil, 227.
- Caso y Cia., Tivola, 10.
- Neckelmann Hnos., Brazil, Molina.
- Urmeneta, Parker & Co., Serrano, 137.

SOUTH AMERICA—Continued.

COLOMBIA.

CARTAGENA.

Importers:
- Americo Ciardelli.
- R. & C. Benedeti.
- Santiago Araujo y Cia.
- Rumie Hnos.
- Lucindo Posso.
- A. & T. Meluk.
- Justo M. Espriella (manufacturer of underwear).

CARTAGENA—Continued.

Importers—Continued.
- Manuel Gomez y Cia. (manufacturers of underwear).
- Angelica P. de Nuñez e Hijos.
- David M. Juliao (women's apparel).
- Isabel C. de Zubiria (women's apparel).
- Susana M. de Martinez (women's apparel).

ECUADOR.

GUAYAQUIL.

Dry goods stores:
- B. Vignolo.
- Wo On y Cia.
- Man Lee y Cia.
- Leon Hing y Cia.
- Madinya y Cia.
- Kuon On Tay y Cia.
- San Siong y Cia.
- L. Tous y Cia.
- A. Y. L. Garcia.
- Kuon San Long y Cia.
- Cam Tong y Cia.
- Kruger y Cia.

GUAYAQUIL—Continued.

Tailors:
- London Tailoring Co.
- Juan Lombeida.
- Genado Arona.
- N. Garzon Henriquez.
- J. Ricardo Gabela.
- Pedro Ayala.
- Lepore y Cia.
- Toribio Cabezas.

PARAGUAY.

ASUNCION.

Wholesale dealers:
- Alsina y Bonvehi, Calle 25 de Mayo Nos. 101–102.
- Angulo y Cia., Calle Escalada esq. Libertad.
- Jorge Bailey, Calle Palma 84–100.
- Sebastion Bruhn, Calle Escalada esq. Libertad.
- Cassacia y Hijos, Calle Palma esq. 15 de Agosto.
- Cramer y Weyer, Calle Ind. Nacional No. 112.
- Angel Crosa y Hijo, Calle 14 de Mayo esq. Palma.
- Fariña y Cia., Calle 25 de Mayo 191.
- Gomez y Cia., Calle Alberdi esq. Estrella.
- Imbert y Cia., Calle Estrella No. 271–75.
- Krauch, F. & Co., Calle Estrella esq. Alberdi.

ASUNCION—Continued.

Wholesale dealers—Continued.
- Lapierre y Cia., Calle Benj. Constant No. 402.
- Rius y Jorba, Calle Palma No. 168.
- Segura, Latorre y Cia., Calle Yegros esq. 25 de Mayo.
- Urrutia, Ugarte y Cia., Calle Estrella 151–85.

Hardware stores (importing cheap woolen and bone buttons):
- Ferreteria Alemana, Calle Pres. Carnot, esq. Ind. Nacional.
- Ferreteria Universal, Calle Palma esq. Ayolas.

OTHER CITIES.

Importers:
- Domingo Barthe, Encarnacion.
- José Canale, Concepcion.
- Quevedo Hnos., Concepcion.

PERU.

LIMA.

Wholesale importers of buttons:
- T. Harth & Co., Calle de Bodegones, 32–36.
- E. & W. Hardt, Calle de Carrera, 466.
- W. R. Grace & Co., Calle de Carrera, 451.

LIMA—Continued.

Wholesale importers of buttons—Con.
- F. Klinge & Co., Calle de Judios, 210–214.
- F. G. Barbieri, Calle de Judios, 240.
- Gulda & Co., Calle de Judios, 451.

SOUTH AMERICA—Continued.

PERU—Continued.

LIMA—Continued.

Jobbers:
- T. Harth y Cia., Calle de Bodegones, 32–36.
- E. & W. Hardt, Calle de Carrera, 466.
- W. R. Grace & Co., Calle de Carrera, 451.
- F. Klinge & Co., Calle de Judios, 210–214.

Dry goods stores:
- F. G. Barbieri, Calle de Judios, 240.
- F. Klinge & Co., Calle de Judios, 210–214.
- A. F. Oechsle, Portal de Botoneros, 116–118 (has women's tailoring department).
- Oddone Razetto y Cia., Calle de Mercaderes, 416.
- M. T. Ortega, Calle de Espaderos, 598.
- Reinoso Hnos., Calle de Mercaderes, 420.
- Fernandez Hnos., Calle de Mercaderes, 401.
- Freundt y Quistorff, Calle de Espaderos, 594.
- Nicolas Falsone, Calle de Mercaderes, 425.
- F. Gardini y Cia., Calle de Concepcion, 500–508.
- Andres Gaillour, Calle de Mercaderes, 435.
- Mezzano y Lopez, Calle de Mercaderes, 404.
- N. E. B. Rivarola, Plateros de San Pedro, 115.
- Rivarola y Bacigalupo, Portal de Botoneros, 130.

LIMA—Continued.

Dry goods stores—Continued.
- D. Bolognini, Calle de Palacio, 52.
- Angel Mezzano, Portal de Botoneros, 190–194.
- Luis Gotuzzo, Calle de Bodegones, 376.
- Antonio Botto, Calle de Aldabas, 291.
- José A. Cueno, Calle de Melchormalo, 301–303.
- Americo Denegri, Calle de Espaderos, 581.
- Vidal y Beltram, Calle de Concepcion, 591–599.
- Valdetaro y Cia., Calle de Virreina, 498.

Men's tailors:
- Manuel Sanz, Calle de la Merced, 618.
- Carlos Masson, Calle de la Merced, 672.
- C. Alcantara, Calle de Mercaderes, 422.
- Alfredo Montagne, Calle de Boza.
- Luis Mavila, Calle de Espaderos, 599.
- Scavia y Cia., Calle de Baquijano, 727.
- Kahn y Haaker, Calle de Mercaderes, 455.
- Louis Foissard, Calle de Union, 526.
- Valle e Hijo, Calle de Mantas, 16.
- N. Sanudo e Hijos, Calle de Union, 388.
- Adolfe Anaya y G., Calle de Union, 694.
- Blum y Ferraldo, Calle de Carabaya, 382.
- Juan Paganini, Calle de Palacio, 254.

VENEZUELA.

CARACAS.

Blohm y Cia.
E. Kossman y Cia.
Travieso y Cia.
Travieso Hnos.
José M. Benarroch.
Juan Manuel Diaz y Cia.
Farson Ramia.
J. de Majo y F. Revoy.
Lander & Mannoni.
Boggio, Yanes y Cia.
Benzecry y Benmergui.
Luis Corrales.
Emilio Simon Lahud.
E. B. Levy y Cia (represent Italian manufacturers).
R. Minlos Sucs.

CARACAS—Continued.

Pariente Hnos.
J. A. Perez y Cia.
Juan Pablo Perez e Hijos.
Santana Hnos. y Cia. Sucs.
Stolk Hnos.
Toledo Hnos.
N. Bonacerraff.
Cubria y Cia.
Clemente Serizier.
E. Dominguez y Hno.
C. L. Schultz.

LA GUAIRA.

Blohm y Cia.
A. Odoardo y Hno.
Alberto Wallis.

SOUTH AMERICA—Continued.

VENEZUELA—Continued.

MARACAIBO.

Wholesalers or importers:
Christern, Zingg & Co.
Blohm & Co.
Breuer, Moller & Co.
Beckmann & Co.
Paris & Nuñez.
Eduardo Vargas.
Rayhrer & Firnhaber.
Numa P. León.

PUERTO CABELLO.

Importers:
Baasch y Romer Sucs.
Jorge Hedderich & Co.

EUROPE.

AUSTRIA-HUNGARY.

CARLSBAD.

Button factories:
Heinrich Adler, Tachau, Bohemia (mother-of-pearl).
Hans Steiner & Co., Tachau, Bohemia (mother-of-pearl).
Bondi & Opper, Karbitz-Teplitz (vegetable ivory).
F. Bruck, Teplitz (vegetable ivory).
Carl Stein, Schönwald-Schluckenau (snap buttons).
Heinrich Wünsche, Schönwald-Schluckenau (thread buttons).
M. Kohner & Sons, Tachau, Bohemia (button molds).
Button wholesalers:
M. S. Feig, Karlsbad.
S. Kraus, Karlsbad.
Manufacturers of linen goods:
Brüder Nastopil, Karlsbad.
Alois Klein, Karlsbad.
Heinrich Kessler's Nachf., Karlsbad.
Manufacturers of gloves:
Johann Krakl, Abertham-Karlsbad.
Chr. Grimm & Sohn, Platten-Karlsbad.
M. Bencker & Sohn, St. Joachimstahl-Karlsbad.
F. Kuhlmann, St. Joachimstahl-Karlsbad.

PRAGUE.

Button wholesalers:
Josef Koretz, 16 Melantrichgasse.
Moritz Koretz, 2 Langegasse.
Eduard Schmolka & Co., 19 Altstädter Ring.
J. Sabath, 32 Rittergasse.
Spitz & Munk, 4 Melantrichgasse.
Leo Beck & Co., 34 Niklasstrasse.
D. Löbl, 15 Königshofergasse.
Friedrich Teweles, 4 Perlgasse.
Mautner & Kohn, 5 Niklasstrasse.
Herman Kafka, 16 Altstädter Ring.

REICHENBERG.

Tailors' supplies:
Barta & Komp.
Ludwig Edelstein.
Gustav Halbig.
A. Hufsky Soehne.
Karl Immergut.
Karl Janowitz.
Othmar Knesch.
Emil Mschitek.
F. J. Roskowetz.
F. J. Seidel.

GABLONZ a/N.

Tailors' supplies:
Emil Berndt.
Rudolf Hein.
F. Ledwinka.

OTHER CITIES.

Tailors' supplies:
Helzel & Stolle, Aussig.
S. A. Katz, Trautenau.
Josef Prunar, Trautenau.

TEPLITZ.

Manufacturers of linen goods:
J. & W. Hauser.
B. Leitenberger.
Siegfr. Steiner.
Julius Beer.

VIENNA.

Agents for foreign manufacturers, selling from samples only, manufacturers' responsibility:
Leopold Moldauer, I. Marzinplatz 6.
Filip Vogl, I. Kohlmessergasse.

EUROPE—Continued.

DENMARK.

COPENHAGEN.

Importers:
  Heiner Petersen, Købmagergade No. 44.
  Schlichtkrull & Uttenthal, Admiralgade No. 6.
  C. L. Seifert, St. Regnegade No. 12-16.

COPENHAGEN—Continued.

Importers—Continued.
  Hvalsøe & Erlandsen, Skindergade No. 45.
  L. A. Berendt & Co., Kronprinsensgade No. 8.

ODENSE.

Importer:
  Rasmussen & Bjerregaard's Eft.

FRANCE.

BORDEAUX.

Wholesale haberdashers:
  Bonnefon et Cie, Rue des Argentiers 21-23-25.
  G. Cattier, Rue Vital-Carles 14-16.
  H. G. Chauvin et Fils, Place du Palais 20.
  Denis Fils Frères, Cours Alsace-Lorraine 41.
  H. et G. Desombre, Place du Palais 16.
  Adrien Duprat, Rue Vital-Carles 15.
Department stores:
  Aux Dames de France, Rue Saint-Cathérine.
  Nouvelles Galeries, Rue Saint-Cathérine.
  Magasin Vert, Place Gambetta.
  A La Dame Blanche, Cours Victor-Hugo 109.
  Louvre de Bordeaux, Cours Alsace-Lorraine 94.
  Paris-Bordeaux, Cours Victor-Hugo 146.
  Au Petit Paris, Cours de l'Intendance 65.
  Royal-Printemps, Rue Saint-Cathérine 75.

HAVRE.

Wholesalers and jobbers:
  C. Chalot, 71 bis Rue du Lycée.
  Chevallier-Thomas, 25 Rue de Mexico.
  L. Desmonts, 41 Rue Frederick Lemaître.
  R. Dodelin, 1 bis Rue Bernardin de St. Pierre.
  M. Lechevallier, 25 Rue de Mexico.
  P. Petit, 84 Rue Dicquemare.
  A. Vimont, 85 Rue Bernardin de St. Pierre.

LYON.

Manufacturers' agent; selling from samples, manufacturers' responsibility:
  Chaudron, 18 Rue de l'Annonciade.

LYON—Continued.

Mercery stores:
  Bret & Cie., 14 Rue Grenette.
  Albert Dedieu, 25 Quai de Bondy.
  Duret & Berger, 78 Rue de l'Hôtel de Ville.
  A. Germain, 12 Rue Emile Zola.
  Hauser, 55 Rue de l'Hôtel de Ville.
  C. Hériey, 33 Rue Dunoir.
  Arsène Laurent, 64 Rue de l'Hôtel de Ville.
  Pachod Frères, 78 Avenue de Saxe.
  F. Vermont, 9 Rue de la Poulaillerie.

MARSEILLE.

Jobbers:
  Louis Leroy, 13 Rue de la Darse.
  Felix Allengry, 8 Rue Paradis.
Tailors' trimming houses:
  E. Namur, 28 Rue Pavillon.
  A. Brun, 28 Rue Tapis Vert.
  G. Jullien, 14 Place des Hommes.
  Auguste Henry, 16 Cours Jullien.
  Bavastro Frères, 60 Rue de Rome.
Dress-trimming houses:
  A. Basset, 15 Rue de la Providence.
  Briançon, Limozin & Cie., 21 Rue de la Darse.
  Bavastro Frères, 60 Rue de Rome.
  C. & A. Barthelemy, 6 and 8 Rue de Rome.
  J. Mariand, 11 Rue des Convalescents.
  Veuve A. Grisolle & Fils, 40 Rue Tapis Vert.
  (The last-named concern is interested in American-made snap buttons.)

NANTES.

Wholesalers:
  Blanchard Frères & Cie., 5 Rue Moulin.
  Clarac & Landais, 6 Place Bouffay.
  A. Sevestre, 1 Quai des Tanneurs.
  Jamin & Viviant, 37 Rue St. Leonard.

EUROPE—Continued.

FRANCE—Continued.

NANTES—Continued.

Dressmakers' and tailors' supplies:
- Lajeunesse, Marx & Cie., 18 Rue du Calvaire.
- Gobbi & Betsch, 23 Rue Contrescarpe.
- H. Petit, 8 Place du Commerce.
- A. Reaumur, 10 Rue Lafayette.
- Georges Ganuchaud, 13 Rue Poissonière.
- Tardy, 20 Rue Crébillon.
- Jumel & Champigny, 14 Rue du Calvaire.

PARIS.

Commission agents (selling for account of manufacturers):
- G. H. Archer, 23 Rue des Petits Hôtels.
- M. Husser, 46 Rue Poissonnière.
- A. Sargent, 11 bis Rue Dupont de l'Eure.
- C. Seidel, 4 Rue Martel.

"Agents-depositaries," or jobbers:
- L. Aston, 57 Rue Ste. Anne.
- Lalande & Fouché, 8 Rue aux Ours.
- F. Manzanarès, 98 Rue Lafayette.
- G. Baron, 4 Rue de Cléry.

PARIS—Continued.

Tailors' and dressmakers' supplies:
- Debauge & Cie., 3 Rue de la Feuillade.
- C. Camus, 7 Rue Charlot. (Men's goods especially.)
- David Frères, 12 Boulevard Bonne Nouvelle. (Men's goods especially.)
- Etling Fils, 25 Rue Croix des Petits Champs. (Men's goods especially.)
- Tourny & Mars, 78 Rue St. Denis.
- Gourdin & Cie., 83 Rue de Richelieu.
- Gruchet & Cie., 4 Rue Saulnier.
- Société Adt., 45 Rue Trubigo.
- Société des Fournitures pour Tailleurs, 52 Rue Ramey.
- L. Trévert, 57 Rue Rambuteau. (Men's goods especially.)
- Marchand & Persent, 53 Boulevard Sébastopol.

Department stores:
- Grands Magasins du Louvre.
- Galeries Lafayette.
- Le Bon Marché.
- Grands Magasins du Printemps.
- La Samaritaine.
- Nouvelles Galeries de la Menagère.
- Magasins Réunis.

GERMANY.

LIST OF MANUFACTURERS.

Breslau:
- Lehnemann & Crummenerl, Holteistrasse 26 (metal buttons).
- Gebr. Bloch Nachf., Frankfurterstrasse 46 (vegetable ivory buttons).
- Bernheim & Loewenson, Neudorfstrasse 48–50 (vegetable ivory buttons).
- Horwitz'sche Knopffabrik, Scherbel & Michaelson, Bergstrasse 20 (metal and vegetable ivory buttons).

Munchen-Gladbach:
- Baehren & Essers, 12 Luerriperstrasse.
- S. Friedlaender Soehne, 31–33 Sittardstrasse.
- Froehlich & Co., 49 Schwogenstrasse.
- Mueller & Co., 94 Luisenstrasse.
- Fritz Niedergesaes, 291–293 Crefelderstrasse.
- Julius Stern, 24–28 Sittardstrasse.
- Neumann & Mendel, 233 Eickenerstrasse.
- Mueller & Hager, 36 Rheydterstrasse.

LIST OF MANUFACTURERS—Continued.

Munchen-Gladbach—Continued.
- Gebrueder Heinemann, 1–17 Kapuzinerstrasse.
- Peter Schnass, 241–243 Neusserstrasse.

Schweidnitz:
- R. Conrad Nachf.

Wohlau:
- Kreutziger Nachf.

Zwickau:
- Louis Stimmung.

BERLIN.

Agents:
- L. Ahronheim, Stübbenstrasse 2.
- Robert Bertling, Kaiserkorso 2, Tempelhof.
- S. & E. Cohn, Potsdamerstrasse 9.
- Klein & Borchardt, Alte Jakobstrasse 57.
- M. Rosenbaum, Charlottenburg, Droysenstrasse 17.

Importers:
- Th. Stargard, Tile-Wardenbergstrasse 30.
- A. Lennhoff, Spandauerstrasse 12.

EUROPE—Continued.

GERMANY—Continued.

BERLIN—Continued.

Importers—Continued.
- Emil Marold, A. G., Adalbertstrasse 51.
- Rumpf & Magerstedt, Scharrenstrasse 11–13.
- Alexander Pier, Christinenstrasse 5.
- Willi von Kegler, Graudenzerstrasse 3.
- Duisberg & Co., Köpenickerstrasse 133.

Jobbers:
- L. Alexander, Jablonskistrasse 34.
- L. Blumenthal, Klosterstrasse 1–2.
- Gebrüder Katz, Leipzigerstrasse 88.
- Lachmann & Co., Kronenstrasse 32.
- P. Schwabe, Kaiser-Wilhelmstrasse 49.
- Seliger & Co., Mohrenstrasse 38.
- J. Wilde Jun., Landsbergerstrasse 56.

Wholesalers:
- Wilhelm Baum, Spandauerstrasse 29.
- Poper & Fürth, Kurstrasse 38.
- E. Schlemmer, Hohenstaufenstrasse 54.
- Treuherz & Fuss, Markgrafenstrasse 48.
- S. Sabatzki, Bayerische Str. 27.

BRESLAU.

Button dealers:
- G. A. Opelt, Junkernstrasse 18.
- S. & E. Saalfeld, Ring 7.
- Schulz & Liebich, Schuhbrücke 8.
- Wilhelm & Wulkan, Junkernstrasse 21.
- M. Forell & Co., Karlstrasse 36.
- Max Guttmann, Reuschestrasse 51.
- August Dünow, Karlstrasse 6.

Button agent:
- J. Müller, Lothringerstrasse 6.

HAMBURG.

Wholesalers (press buttons):
- Paul Hohmann, Hoheluft Chausee 68.
- Carl Mez & Sohne, Gr. Burstah 47–49.
- Paetzola & Bau, Welckerstrasse 3.

Agents (press buttons):
- C. Schomann & Cie., Gr. Burstah 25.
- Franz C. Schulz, Raboisen 62.

Wholesalers (metal buttons):
- Georg Greutzmann, Gr. Burstah 55.
- C. G. Ulrich Nachf., Neuerwall 39.

Agent (metal buttons):
- Wilhelm Beckmann, Admiralitaetstrasse 1.

HAMBURG—Continued.

Wholesalers (mother-of-pearl buttons):
- C. Bergmann & Cie., Alsterdamm 7 (importers of Japanese pearl buttons).
- Arnold Mortel, Schopenstehl 5.
- Schultz & Klockmann, Muehlenstrasse 50, Muehlenburg.

Agent (mother-of-pearl buttons):
- C. Schomann & Cie., Gr. Burstah 25.

Wholesalers (horn buttons):
- Ernst Brendler, Admiralitätstrasse 38 (specialty buttons for ships' officers, etc.).
- J. G. Dibbern, Gr. Burstah 50.

Wholesalers (leather buttons):
- H. W. Daesendschon, Amelungstrasse 13–14.
- Rud. Aug. Koenig, St. Georg, Langereihe 73.

Wholesalers (fancy buttons):
- Ahlf & Heinssen, Wexstrasse 13b.
- Reis Gebr., Kaiser Wilhelmstrasse 85.
- Herm. Stegmann, Dammhorstrasse 2.

Agents (fancy buttons):
- Wilhelm Beckmann & Cie., Admiralitaetstrasse 1.
- C. Schomann & Cie., Gr. Burstah 25.
- Alfred Starkjehann, Breitestrasse 14.

Agents (ivory-nut buttons):
- Richard Kunze, M. Ranniger Nachf., Koenigstrasse 21–23.

Tailors' trimming houses:
- Ernst Bracker, Kaiser Wilhelmstrasse 93.
- A. Cohn, Jr., Nachf., Gr. Burstah 49.
- Joh. H. L. Luetzen, Nachf., Bergstrasse 3.
- Paul Knaur, Lange Muehren 9, Suedseehaus.
- F. A. Seiler, Spitalerstrasse 12.
- H. Bandmann, Moenckebergstrasse 9 (agent).

Department stores:
- Hermann Tietz, Jungfernstieg 15.
- Gebr. Heilbuth, Steinstrasse 121–127 (Hmbg. Engros-Lager).
- Rudolph Karstadt, Moenckebergstrasse 16.

PLAUEN.

Jobbers:
- Groll & Agsten, Annenstrasse 55.
- K. von Weisel, Neustadtplatz 12.

EUROPE—Continued.

GREECE.

ATHENS.

Principal commission agents representing European button exporters:
- Baumann & Beckmann, Deca Street.
- G. F. Harr, St. Theodore Square.
- E. Hirst, Hermes Street.
- Fr. Frank, Deca Street.

Firms making a specialty of buttons:
- A. Farmakis, Athinaides Street.
- G. Tziros, Eolou Street.
- B. Kivelos.
- G. Batzas.

Dry goods stores:
- Th. Petropoulos, 40, Hermes Street.
- Papaspiropoulos, Anagnostopoulos, & Co., Deca Street.
- Mangioros & Roussopoulos, 39 Hermes Street.
- P. Costopoulos, 75 Hermes Street.
- Marcou Bros., 66 Hermes Street.
- George Roussopoulos, 86 Hermes Street.
- C. Stratigopoulos, Capnicarea Square.
- Triantafillos, Mantzoulinos & Co.

SALONIKI.

Importers:
- Fils de G. A. Errera & Co. (Ltd.).
- The Anglo-Hellenic Co. of Saloniki. (Ltd.).
- Mair Tchenio & Alcalay.
- Acher M. Israel.
- Estab. Orosdi-Back.
- B. Mourtsopoulos.

Agents, selling on manufacturer's account:
- Jenny & Vock.
- Mario M. Covo.
- Albert J. Saporta.
- Leon Sabetay.

PATRAS.

Commission agents:
- Stoltenhoff & Lucas
- M. Zullas.

ITALY.

LIST OF MANUFACTURERS.

Bergamo:
- Motta & C., Bonate Sotto.
- Finanzi Giovanni & Ca., Chiudano.
- Fontana Roux Pietro, Gorlago.
- Italo Frattini & Ca., Grumello del Monte.
- Comotti, Ghidini & Ca., Palosco.
- Ing. E. Fossati & Ca., Treviglio.

Brescia:
- Lanfranchi Giovanni, Palazzolo sull'Oglio.
- G. B. Lozio, Palazzolo sull'Oglio.
- Lozio, Svanetti & Ca., Palazzolo sull'Oglio.
- Schivardi Antonio, Palazzolo sull'Oglio.

Como:
- Ambrosini Ambrogio, Castiglione Olona.
- Giudici Fratelli, Castiglione Olona.
- Mazzucchelli Fratelli & Ca., Castiglione Olona.
- Clerici Carlo & Ca., Lonate Ceppino.

Cuneo:
- Fllo. & Sorella Meinero.

Milan:
- Societá Anonima, Ambrogio Binda, Corso Romana 122.
- Fontana Roux Pietro, Corso S. Celso 6.
- G. B. Izar, Corso Garibaldi 104.
- Pastori & Ca., Via Washington 70.
- Strazza Speroni & Ca., via Montevideo 13.
- Maroni Giuseppe, Via Baracca 3.

LIST OF MANUFACTURERS—Continued.

Novara:
- Giovanni Bertini, Galliate.
- Ing. P. & C. Pozzi, Meina (bone and horn).
- Pugliese & Segre, Vercelli (horn).
- Luigi Mazzuchelli, Vercelli (horn).
- Fratelli Treves, Vercelli (horn).
- Ing. P. Pozzi & C., Meina.
- A. E. Treves, Vercelli.

Padova:
- Zucchermann & Diena.

Piacenza:
- Barsi Francesco & Ca.
- Ing. E. Rossini & Ca.
- Industria Bottoni.
- Giuseppe Ricchetti.

Turin:
- Fratelli Simonis, Candiolo (agate, horn, bone, etc.).
- Candido Oberto, Piossasco.
- Carlo Novella, Oulx.
- Bellone, Sangano.
- Flli. Pagliero, Settimo Torinese (all varieties).
- Carlo Falchero, Viu.
- Felice Rocchetti, Viu.
- Giuseppe Allamano, Viu.
- Pagliero Clemente, Settimo Torinese.
- Pagliero Giovanni, Settimo Torinese.
- Pagliero Luigi, Settimo Torinese.

Legnago:
- Valeri & Co.
- Fratelli Bevilacqua.

EUROPE—Continued.

ITALY—Continued.

BOLOGNA.

Wholesalers:
- Tibaldi, Cuppini & Bendini, Polese 10.
- Giorgio Albertazzi, Barbaziona 8.
- Morini, Tassi & Ca., Cavaliera 24.
- Alberto Rosso, Piazza Minghetti 3.

CATANIA.

Representatives of button manufacturers:
- Francesco Cimino, 9 via Vanasco.

Wholesalers:
- Agostino Mioccio.
- Domenico Mazzarelli & Figli.
- Paolo Lanza & Ca.

FLORENCE.

Wholesalers:
- G. Andreani & Ca., Via Cimatori 3.
- Gio. Bianchini di Claudio, Mercato Nuovo.
- M. Carpena & Filo., Via Ghibellina 110.
- E. Coppini, Via Tavolini 9.
- E. Falcini Succ., Via Tavolini 5.
- Egisto Gori, Via Tavolini 1.
- Fratelli Quecrioli, Por S. Maria 6.
- Emilio Galli, Via del Sole 2 (metal buttons).
- Lorenzo Gori, Via Tripoli (metal buttons).
- Metello Zingoni & Ca., Lamarmora 19 (metal buttons).
- Fratelli Ciantelli, Via Nazionale 19 (metal buttons).

LEGHORN.

Wholesale dealers:
- Bassano, David, e Figli, Piazza Cavour 2.
- I. & S. Corcos, Via del Telegrafo 2.

MESSINA.

Representatives of button manufacturers:
- Pietro Santangelo.
- Francesco Grillo fu Cosimo.

Wholesale dealers in buttons:
- Bartolo Harano.
- G. Rotino.
- Giuseppe Giacobbe.

NAPLES.

Wholesale dealers:
- Mele & Ca., Via Municipio 46–54.
- R. Finzi & Ca., Via Roma 300–303.

NAPLES—Continued.

Wholesale dealers—Continued.
- Bocconi Bros., Via Roma 341–345.
- Giacomo Ballarini, Corso Giuseppi Mazzini 38–44.
- P. & P. Moccio, Via S. Brigida 57–60.
- Schostal Magazzini, Via Chiaia 185–190.
- Daniel Carsana, Corso Umberto Primo 135 and 151.
- Wm. Shilton & Co., Santa Brigida.
- T. A. Alliotti, Via Municipio 7–11.

PALERMO.

Button dealers:
- Luigi Merighi, Via Vetriera 97.
- Gioacchino Sposito, Via Sedie Volanti 55.
- Francesco D'Onofrio, Via Bara.
- G. Feo & Ca.
- G. Paterniti & Fili.

PARMA.

Wholesalers:
- Fili. Dalla Giacoma, Strada Cavour.

PIACENZA.

Wholesalers ("frutto" buttons):
- Cammillo Perotti, Garibaldi 57.
- Ing. Galletto Vaccari & Ca., Molineria S. Giovanni.
- Societá Industria Bottoni, Molineria S. Niccolo.
- Omodeo Sale, G. Pissavini Ca., Via Zolferino.
- Vittorio Corvi, Castel S. Giovanni.
- Bottonificio Fili. Mai & Ca., Castel S. Giovanni.

TURIN.

Importers:
- Ivaldi & Quaglia, 27b Via Maria Vittoria.
- All 'Ancora, Via Garibaldi, ang. Via S. Tommaso.
- Ditta B. Rossetti, 1 Via S. Tommaso.
- Desiderio Righini & Figli, 2 Via Roma.
- B. Vigliani, 2 Via Po.

Tailors' supply houses:
- Fabbriche Riunite per la vendita diretta alle Sartorie, 31 Corso Ponte Mossa.
- Fontana, Luigi fu Giovanni, 50 Corso Vitt. Em. II.

EUROPE—Continued.

ITALY—Continued.

TURIN—Continued.

- Tailors' supply houses—Continued.
  - Gamba, Luigi, 32 Via Lagrange.
  - Gamba, Serfa. & Figlio, 7 Via S. Tommaso.
  - Ivaldi & Quaglia, 15 Via Finanze.
  - Schulte Ermine Bienenfel, 8 Via Mancini.
  - Viora, Margherita, 5 Via Accademia Albertina.
  - Aloi, Prof. Rocco, 1 Via Bogino.
  - Flli. Bachi, 20 Via Principe Amedeo.
  - Bergamo, Carlo, 30 Via Germanasca.
  - Bertola, F. & Ca., 9 Via Pietro Micca.
  - Bria & Manfrino, 6 Via Garibaldi.
  - Cappa, Vitt., 69 Via XX Settembre.
  - Coen, Gius., 2 Via Roma.
  - Colomba Gius., 1 Via Bertola.
  - Del Pero, Maria, 3 Via Genova.
  - Durando, Carlo, 17 Via Roma.
  - Frache, G., 19 Via S. Secondo.
  - Pietro Giacobino, 27 Via XX Settembre.
  - Granero Coniugi, 211 Via Nizza.
  - Liza, Antonio, 19 Via Carlo Alberto.
  - Morel, G., 1 Via Milano.
  - Mosca, Pilade, 11 Via S. Teresa.

TURIN—Continued.

- Tailors' supply houses—Continued.
  - Nigrino, Giulio, 34 Via Carlo Alberto.
  - Piovano, Margherita, 42 Via S. Giulia.
  - Raffignone, Vitt., 2 Via Po.
  - Revel, D. G., 24 Via Monte di Pietà.
  - Roscuni, Candida, 3 Via S. Maria.
  - Salamone, Alessandrina, 10 Via Roma.
  - Sagre, Gabriele, 9 Via Carlo Alberto.
  - Soc. Cooper. Ital. Fratellanza Sarti, 9 Via Pietro Micca.
  - Tempo, Vittorio, 18 Via Palazzo di Città.
  - Trinelli, Giacinto, Galleria Subalpina.
  - Truffa, Caterina, 9 Via Cavour.
  - Vallerio, Michele, 25 Corso Principe Oddone.
  - Valobra, Cesare & Ca., 9 Via Pietra Micca.

VENICE.

- Wholesaler and jobber:
  - Successori Pietro Granziotto, San Silvestro.

NETHERLANDS.

AMSTERDAM.

- Agents who sell from samples on manufacturers' responsibility:
  - A. S. Polak, Spinozastraat.
  - A. van Beem, Nieuwe Heerengracht.
- Button jobbers, wholesalers, or importers who buy for their own account:
  - Lehmann & Co., O. Z. Voorburgwal.
  - Langemeyer & Stocker, O. Z. Voorburgwal.
  - Gebr. Langemeyer, Jan Hansenstraat.
  - Gomperts & Lezer, O. Z. Voorburgwal.
  - I. L. Flesseman, Nieuwmarkt 23.
  - B. I. de Vries & Co., Jodenbreestraat.
- Tailors' trimming houses:
  - Au Bon Marché, Kalverstraat.
  - Hirsch & Co., Leidscheplein.
  - Metz & Co., Keizersgracht.
- Dress trimming house:
  - N. V. Gebr. Gerzon's Modemagazynen.

AMSTERDAM—Continued.

- Woolen dealers who handle tailors' supplies:
  - Langemeyer & Stocker, O. Z. Voorburgwal.
  - de Vries, van Buuren & Co., Jodenbreestraat.

ROTTERDAM.

- Importers and wholesale dealers:
  - I. de Jongh & Co., Hoogstraat 337.
  - I. L. Flesseman, Botersloot 72.
  - Gebrs. Groenhuizen, Oppert 82.
  - Isidore Haas & Co., Nieuwehaven 144.
- Tailors' trimming houses:
  - Michel & van der Huls, Molensteeg 5.
  - W. & J. Grashoff, Steiger 29b.
  - Jac. Schipperus, Oppert 136b.
- Dress trimming houses:
  - H. & G. Schröder, Hoogstraat 264.
  - M. Hartogs, Hoogstraat, 369.
  - Maison de Dentelles, Korte Hoogstraat 30.
  - Gebrs. Bles, Hoogstraat 321.
  - Magazyn de Modegids, Hoogstraat 386.
  - Passementerie & Modehandel, Stadhuissteeg 12b.

EUROPE—Continued.

NORWAY.

BERGEN.

Agents for foreign commission houses, selling from samples on manufacturers' responsibility:
- Joh. Broegelmann.
- Severin Halvorsen.
- Caesar Krumbhaar.
- Martin Larsen.
- Richard With-Johnsen.

Button jobbers, wholesalers, or importers who buy for their own account:
- Wald. Jakobsen.
- Joh. Broegelmann.

BERGEN—Continued.

Button jobbers, wholesalers, etc.—Con.
- Ferd. Storjohans Sönner.
- Sundt & Co., A/S.
- M. F. Zukermanns Magazin.

STAVANGER.

Wholesalers (buying for their own account):
- Eidam & Rendedal.
- O. Olsen & Co.
- Roland Petersens Eft.

PORTUGAL.

LISBON.

Wholesalers:
- Fernandes e Martins (Ltd.), Rua da Praça da Figueira 24.
- Alexandre Barreira, Rua de Conceição 129.
- F. Costa Marques, Rua de Conceicã 70–1°.
- M. Reis Tavares (Ltd.), Rua de Santa Justa 42–1°.
- Oliveira e Ca., Rua da Conceição 72.
- Alvaro Mendes (Ltd.), Rua dos Sapateiros 91–1°.
- Manuel J. de Souza, Rua de Santa Justa 52.
- Gonzales e Piriz, Rua des Douradores 178–1°.

Trimming houses:
- David e David, Rua Garrett 112–118.
- Tatá e Cta., Rua Garrett 53–55.
- J. A. Martins e Ca., Rua da Cônceição 99.
- A. M. Conde e Ca., Rua Augusta 224.
- Silveira e Silveira, Rua Augusta 280.
- Amorim Lopes (Ltd.), Rua da Conceição 91.
- Ramos e Guimarães, Rua dos Retrozeiros, 87–89.
- A. d'Assis Camillo (Ltd.), Rua da Conceição 121.
- Antunes Moreira, Sucr., Rue da Conceição, 71.

OPORTO.

Importers:
- A. R. d'Araujo Lima e Ca., Rua Trindade Coelho 26.
- A. R. Vilela e Ca., Rua do Loureiro 24.
- Botelho e Abreu, Largo S. Domingos 68.
- Cesar A. d'Oliveira, Rua Elias Garcia 93.
- Costa e Moreira, Rua das Flores 174.
- Elisio da Silva, Rua Elias Garcia 140.
- Gomes, Brito e Miranda, Largo dos Loyos 24.
- José M. da Silva Guimarães, Travessa Rua Formosa 12.
- M. Diaz, jr., e Ca., Rua Mousinho da Silveira 200.
- Pereira e Bacellar, Rua Sá da Bandeira, 132.
- Pimentel e Alves, Rua das Flores 158.
- Silva e Machado, Rua Mousinho da Silveira 121.
- Ferreira Marques e Ca., Rua das Flores 72.

FUNCHAL, MADEIRA ISLANDS.

Importers (dry-goods stores):
- Bazar do Povo.
- Coelhos Irmãos.
- Silvestre Bros.
- Tavaes, Ant. Andrade e Ca.

RUSSIA.

RIGA.

Agents:
- Isidor Wulff, Thronfolger Boul. 5.
- H. Bruggemann, Gildstuberstrasse 4.

Wholesale importers:
- Act-Ges. Moritz Feitelberg, Sünderstrasse.

RIGA—Continued.

Wholesale importers—Continued.
- S. A. Blichmann & Soehne, Sünderstrasse.
- Nathansohn & Bernheim, Sünderstrasse.
- M. Kron, Sünderstrasse.

EUROPE—Continued.

RUSSIA—Continued.

HELSINGFORS, FINLAND.

Importers, wholesalers, and retailers:
- Oskar Froeberg's Eftf.
- Frithjof Lindstrom.
- Ad. Baltscheffsky.
- Tukkukauppa Osakeyhtioe.
- Taluos Osake-Kauppa.
- Suomen Osuuskauppojen Keskusosuuskunta, r. l.
- Th. Neovius Aktiebolag.

ODESSA.

Agents:
- Theodor Ginzburg, Pokrovski Per No. 1.
- J. S. Kornin, Preobrajenskaja No. 38.
- J. A. Tronpianski, Tiraspolskaja No. 13.

Wholesale stores:
- M. Sapognikov, B. Arnautskaja No. 91.
- C. H. Hurfinkel, B. Arnautskaja No. 89.
- B. Dusman, B. Arnautskaja No. 78.

ROSTOFF ON DON.

- S. Gentch-Ogluev and I. Shaposhnikov., Sadovaia St., No. 47.
- A. Iablokoff & Sons, Taganrovski Prospekt No. 42.

TIFLIS.

Wholesalers:
- T. D. Puginoff, Alihanoff & Co., Armyanski Bazar No. 11.

TIFLIS—Continued.

Wholesalers—Continued.
- Tchavtchavidje & Gvelisiani Co., Golovinsky Pr. 34.
- Melik-Marutiantz Bros. & Co., Mantashevsky Riad.

Agents:
- Leonidas Weiss, Armyanski Bazar.
- Peter Krimoff, Bebutovskaia St.

WIBORG, FINLAND.

Importers and wholesalers:
- Osakeyhtioe Sofia Zweiberg aktiebolaget.
- A. Auvinen Osakeyhtioe.
- Pyykkoe & Toivonen.
- John Lindgren.

WASA, FINLAND.

Importers and wholesalers:
- Carl Finnilae Aktiebolaget.
- Otto Kindberg.
- John Nylund.
- Lassila & Tikanola.

OTHER CITIES IN FINLAND.

Importers and wholesalers:
- K. P. Ruuskanen, Osakeyhtioe, Tammerfors.
- John Blom, Tammerfors.
- Oulun Tukkukauppa Osakeyhtioe, Uleaborg.
- H. J. Idman, Bjoerneborg.

SPAIN.

BARCELONA.

Agents who sell from samples for direct shipment by manufacturer to purchaser:
- Ramón Burgada, Consejo de Ciento 277.
- Juan B. Llopis, Cortes 504.
- Roca y Silvestre, Puerta del Angel 2.
- J. Casanovas, Universidad 23.
- Andrés Gallego, Lauria 31.

Button jobbers, wholesalers, or importers buying for their own account:
- Hijos de Francisco Forgas, Bagur (Gerona).
- E. Puigdengolas, S. C., Cortes 670.

Tailor's trimming houses:
- José Fortier, Plaza Santa Ana 19.
- Arturo Polls, S. Pablo 30.
- Ramón Reventos, Trafalgar 7.
- J. López Bonet, Claris 74.

Dress trimming houses:
- E. y E. Bartroli, Vergara 14.
- J. Bofill y Cia., Riera San Juan 37.
- Hijo de Juan Contarell, Caspe 30.

BARCELONA—Continued.

Dress trimming houses—Continued.
- Ramón Morera, Puerta Ferrisa 8.
- I. Mir Rovira, Rambla Cataluña 3.
- Raich Hnos., Plaza Urquinaona 10. ona 10.
- Robusté y Francés, Puertaferrisa 30.
- Enrique Borrás, Paseo de Gracia 37.

MADRID.

Importer and wholesaler:
- J. Antonio Pascual, Calle de Carretas 14.

Importers and jobbers:
- Largacha Hnos., Montera 45.
- F. Rodriguez Hnos, Montera 39.
- Felipe Garcia Quiros, Romanones 7.
- Haza y Cia., San Jeronimo 31.
- Francisco Florez, Hortaleza 19.
- Sobrinos Peña Villarejo, Concepcion Jeronima 25.
- Manuel Fernandex Aedo, Pontejos 4.
- Sempere y Oviedo, Pontejos 6.
- Sobrinos de Caso, Pontejos 2.
- Antonio Ubillos, Correos 4.

EUROPE—Continued.

SPAIN—Continued.

MADRID—Continued.

Agents for foreign manufacturers selling from samples:

Emilio Tobes, San Bernardo.
Granda y Machol, Cruz 7.
Felix Falkenstein, Colegiata 7.
Francisco Pleiffer, Alameda 5.
Ramón Gimeno, Cava Baja.
M. Fernandez Caro, Preciados 7.
Maximo Kurten, Conde de Aranda.
Gerardo Alvarez, Mayor 88.
Mauricio Diederichs.

MALAGA.

(Correspondence must be in Spanish.)

Commission agents representing button manufacturers:

Miguel Hidalgo, Calle Comisario 6.
José Atencia Garcia, Calle Liborio Garcia 2.
Aurelio Lechuga, Calle Larios 6.
Julio del Pozo, Calle Strachan 14.
Antonio Prados.
Vda. de Enrique Jimenez, Calle Santo Domingo.
Franco, Martinez & Co., Calle Sta. Maria 4.
Bernardo Garcia Martinez, Calle Huerto Madera 5.

SEVILLE.

Agents selling from samples, manufacturer's account:

Evaristo Liñan, G. de Vinuesa 7 (best trade).
Manuel Carmona, G. Cuadrado 12 (best trade).
Joaquin Ruiz de Castro, Tetuan 14 (best trade).
Juan Ruiz Murcia, Caleria 3.
José Fernandez Moreno, Alfalfa 4 y 6.
Juan Maqueda, Plaza de Alfonso XIII 8.
Antonio Lopez Gimenez, Pi y Margall 15.

Button wholesalers who buy for their own account (the first nine cater to the highest priced trade):

La Hoz y Gomez, Chapineros 8 y 10.
Francisco Martin de Soto S. en C., Puente y Pellon 25.
Perez y Silgado, S. en C., Alvarez Quintero 1.
Pedro Velazco y Cia., Cordoba 2.
Joaquin Rioja Romero, Puente y Pellon 22.

SEVILLE—Continued.

Button wholesalers who buy for their own account, etc.—Continued.

Rodriguez y Ramos, Agujas 3 y 5.
Sanchez y Cia., Alonso el Sabio 11 y 13.
Velasco y Sobrinos, Chapineros 2.
Viuda de Jacinto Sanchez, Federico de Castro 60.
Baldomero Bernaldez Corral, Cordoba 1.
Pedro Contreras Romero, Rioja 14.
Luis Garcia Fernandez, Lineros 9.
Gotor y Cia., S. en C., Fernandez y Gonzalez, 22.
Molina y Burgos, Francos 42.
Leon Perez y Martinez, Cordoba 15.
Guillermo Rioja Romero, Federico de Castro 39.
Braulio Saenz Martinez, Agujas, 2.
Quiterio Tobia Romero, Federico de Castro 31.
Villegas Hnos., Francos 29.
Martin Zabala Herrero, Plaza del Pan 2.

VALENCIA.

Importers who buy for their own account:

José Mellado Chapa, Calle Sangre 7.
José Maria Quadrado, Calle San Vicente 75.
Sánchez de Leon Hnos., Calle San Vicente 20.
Juan Emilio Campoy, Calle San Vicente 1.
Bernardo Gómez, Calle San Fernando.
F. Gómez Ferrer, Calle San Vicente 58.
J. Muñoz Vizcaino, Calle San Vicente 28.
Juan Martinez, Plaza Porchets 6.
Juan Senabre Hnos., Plaza Porchets 3.
Wenceslao Torralba, Plaza de las Yierbas.
Manuel Perales, Calle Bolseria 19.
Enrique Grau y Cia., Calle Mercado 4.
J. Vernia y Cia., Calle Gracia 20.
José Sempere, Calle Sagunto 110.
José Company, Calle Flasaders 20.
Beltran y Belda, Colchoneros 1.
Segui Hnos., Calle San Vicente 98.

Agents for foreign manufacturers, selling from samples for direct or indirect shipment, manufacturer assuming responsibility for the account:

Leopoldo Cabrera, Plaza Murcianos 3.

EUROPE—Continued.

SPAIN—Continued.

VALENCIA—Continued.

Agents for foreign manufacturers, etc.—Continued.
- José Maria Benlloch, Calle Santa Irene.
- Vicente Veres, Gran Via Germanias.
- Ramiro Saez, Calle Padre Jofre.
- Carlos Castelló, Calle Sagunto, Letra LL.
- Salvador Izquierdo, Calle Mar 74.
- José Gumiel, Plaza Músico Gómez.

TENERIFFE, CANARY ISLANDS.

Importers who can act as agents:
- C. Garcia Dorta.
- M. Rallo.

LAS PALMAS, GRAND CANARY.

Importers:
- Juan Cabrera Iglesias.
- Viuda Tomas Lozano-Perez.
- Penate y Cia.

OTHER CITIES.

(Correspondence must be in Spanish.)

Commission agents representing button manufacturers:
- Juan de Rojas e Hijos, Antequera.
- Don Salvador Jimenez, Ronda.
- Diego Vazquez Alonso, Calle Cisnero 1, Almeria.
- Angel R. Agudo, Calle Mesones 33, Granada.
- Emilio Fernandez Robles, Calle San Jacinto 7, Granada.
- Ramon Aguayo Martinez, Calle Agua 7, Baza.
- Chilllda Guzman y Paya, Calle Salida 22, Jaen.
- Geronimo Porras Sanchez, Calle B. Soriano 31, Jaen.
- José Lopez, Alcala la Rea.
- Vicente Cuberta, Baeza.
- José Olivares & Co., Lahneron 73, Linares.

SWEDEN.

GOTEBORG.

Wholesale merchants handling dry goods and haberdashery:
- F. W. Hasselblad & Co., 1 Ostra Hamngatan.
- Lagerstedt & Co., 58 Kyrkogaten.
- Bendix, Josephson & Co. (head office in Stockholm), 31 Ostra Hamngatan.
- Aug. Abrahamson & Co., 16 Ostra Larmgatan.
- P. Em. Lithamder & Co., A. B., 19 St. Nygatan
- Iwar Dawidson, 10 Stampgatan.
- Aktiebolaget Löfmark & Co., 1 Klappressareg.
- H. J. Heyman & Co., 18 Norra Hamngatan.
- L. Sterner & Co., 9 Korsgatan.
- Brink, Johanson & Co., 6 Tradgardsgatan.
- Aktiebolaget American Bazar (wholesale and retail, cheap goods), 4 and 6 Lazarettgatan.

MALMO.

Wholesale merchants handling dry goods and haberdashery:
- Aktiebolaget Aurell & Co., 32 Baltzarsgatan.

MALMO—Continued.

Wholesale merchants handling dry goods and haberdashery—Contd.
- Aktiebolaget Evald Larsen, 1 Sodergatan.
- Ludvig Lindgren & Co., 3 Sodergatan.
- Aktiebolaget Adolf Lindahl, 33 Vastergatan.
- Aktiebolaget Albert Zadig, 35 Nygatan.
- C. & M. Fougstedt, 6 Sodergatan.
- O. G. Nilsson, 70 N. Vallgatan.
- Aktiebolaget M. Flensburg Söner, 9 Sodergatan.
- Nordmark & Persson, 66 N. Vallgatan.

Agents:
- Nils Alm, 18 Kopmansgatan.
- Oscar Josephson, 60 Kyrkogatan.
- Ernst Ljunggren, 31 Drottninggatan.

STOCKHOLM.

Wholesale dealers:
- H. S. Josephson.
- Bendix, Josephson & Co.
- Nilsson & Lindström.
- Ab. G. Abramson & Co.
- G. Rosendahl & Co.
- Stockhaus & Co.

EUROPE—Continued.

SWITZERLAND.

LIST OF MANUFACTURERS.

Berne:
- Otto Schaerer, Terassenweg 18.

Zurich:
- Xaver Reichlin, Horgen.
- Alb. Guller Soehne, Huettikon.

BERNE.

Button jobbers, wholesalers, or importers buying on own account:
- Reinhard & Hebeisen, Ryffligässchen 8 (chiefly for collar buttons).
- Haberstich & Martin, Amtshausgasse 3 (important).
- F. A. Brugg, Längg., Gesellschaftsstrasse 21.
- Gerber & Krebs, Montbijoustrasse 30.
- Au Bon Marché, Spitalgasse 3.

ZURICH.

Wholesale button dealers for men's clothing:
- H. Pfister & Co., Sihlhofstrasse 29.
- Hiestand-Wirz & Co., Bleicherweg 13.
- Hans Grossmann, Schweizergasse 8.
- Liebermann & Waelchli, Bahnhofstrasse 57b.
- A. Schmid, Muensterhof 14.

Wholesale button dealers for women's garments:
- A. Fenner Soehne, Rathausbruecke 8.
- M. Jaeckle-Marti, Bodmerstrasse 3.
- Rud. Hallheimer, Seidengasse 10.
- Wiegner & Maier, Sihlstrasse 46.
- Arnold & Co., Rennweg 26.

LUGANO (TESSIN).

Wholesale button dealer for men's clothing:
- Zucolli & Co.

UNITED KINGDOM.

LIST OF MANUFACTURERS.

- Buttons (Ltd.), Portland St., Birmingham.
- Firmin & Sons, Villa St., Hockley, Birmingham.
- H. & J. Beale, 16 Spear St., Manchester.

BIRMINGHAM.

Tailors' trimming warehouses:
- Samuel Worsey & Sons, 31 Union St.
- Holroyd & Co. (Ltd.), 25 Carrs Lane.
- Boddington & Sons, 20 Cannon St.
- Heaton & Taylor, Crooked Lane.
- John T. Johnson, 17 Carrs Lane.
- George Hather, 166 Hurst St.

BRADFORD.

Wholesale clothing supplies:
- Bateman Foster, 53 Sunbridge Road (pearl buttons for women's garments, shirts, and underwear).
- Haworth & Co., Barry St. (pearl, glass, and celluloid buttons for blouses and shirts).
- Samuel Hinchcliffe, 49 Sunbridge Road (pearl and glass buttons for blouses and women's wear).
- Wm. Longfield, 55 Sunbridge Road (buttons for men's clothing trade).
- George A. Thomas, 3 Lewis St., Halifax (white buttons for underclothing trade).

BRADFORD—Continued.

Blouse and skirt makers:
- F. A. Aspinwall & Co., 2 Green St.
- Chas. B. Barrand, 8 Royal Arcade.
- Beattie, Sons & Co., 18a Johngate.
- Boocock & Smith, Victoria Chambers, Little Horton Lane.
- Bridge Mills Co., Barkerend Road.
- J. Hemingway & Co. (shirt makers), 5 Barry St.
- R. Hodgson & Co., 116 Sunbridge Road.
- A. Holt & Sons, 20 Barry St.
- Jarvis & Co., 115 Caledonia St.
- J. G. Mallinson, Bower St.
- W. Mercer & Co., Humboldt St.
- F. Murgatroyd & Co., 499 Leeds Road.
- F. Parkinson & Co., 16 Chester St.
- A. Riddell & Co., Humboldt St.
- G. Sheldrake & Sons (underclothing) 4 Wade St., Halifax.
- R. Whitehead & Co., 14 Sunbridge Road.

BRISTOL.

Agent:
- George Arthur Warren, 13 John Street, Broad St.

Button jobbers, wholesalers, etc.:
- Alexandra Co., 51–61 Whiteladies Road.
- Barton Warehouses (Ltd.), St. James' Barton.

EUROPE—Continued.

UNITED KINGDOM—Continued.

BRISTOL—Continued.

Button jobbers, wholesalers, etc.—Con.
- Bristol Drapery Co., Avonmouth.
- S. T. Davey, 100 Whiteladies Road.
- Jolly & Son, 40 College Green.
- Jones & Co. (Ltd.), 56 Wine St.
- Baker, Baker & Co., 49 Wine St.
- J. F. Bolt & Co., 112 Saint Thomas St.
- Copestake, Crampton & Co., 10 Bridge St.
- C. J. Dearlove & Co., 9 Portland Sq.
- J. H. Hill & Son, 8 Union St.
- Kilsby, Leech & Garland, 3 John St.
- Phillips & Piper, 16 Mary-le-Port St.
- J. F. Taylor & Son, 32 College Green.
- Redland Drapery Co., 13 Whiteladies Road.
- B. C. Shepherd & Co., 36 Clarence Road.
- Verrier & Co. (Ltd.), 39 Wine St.
- Wilkinson & Riddell (Ltd.), 39 Victoria St.
- Williams & Co., 77 Park St.

Tailors' trimming and supply houses:
- G. Bateman, 45 College Green.
- J. F. Bolt & Co., 112 St. Thomas St.
- J. & W. Davey, 32 Ashley Road.
- Bristol Furniture Nail & Button Co., St. James' Works, Wade St.
- W. F. Godfrey, 402 Stapleton Road.
- E. J. Goss, 25 Cumberland St., St. Paul's.
- Grove Bros., 24 Broad St.
- H. Hill & Sons, 9 Christmas St.
- Jones & Co. (Ltd.), 56 Wine St.
- Linen Manufacturing Co., 4 Narrow Wine St.
- H. J. Machin, Rupert St.
- M. A. Stedeford, 223 Stapleton Road.
- Trull & Co., 22 Broad St.
- Francis Tidball, 371 Stapleton Road.
- Arthur Quant, 14 Clare St.
- Alexandra Co., 51 Whiteladies Road.
- Baker, Baker & Co., 49 Wine St.
- Barton Warehouses (Ltd.), 1 St. James' Barton.
- Cooperative Wholesale Society, Broad Quay.
- Harris, Newman & Co., 145 Redcliff St.
- R. Lambert & Sons, 20 High St.
- Andrew Little, 34 Ashley Road.
- Phillips & Piper (Ltd.), 16 Mary-le-Port St.
- Wakefield Bros., 58 Old Market St.

Dress-trimming houses:
- Alexandra Co., 5 Whiteladies Road.
- Barton Warehouses (Ltd.), St. James' Barton.
- J. F. Bolt & Co., 112 St. Thomas St.

BRISTOL—Continued.

Dress-trimming houses—Continued.
- Chudley's Drapery Co., 234 Stapleton Road.
- G. F. Dendy, 9 Merchants Road, Clifton.
- Direct Supply Co., 9 St. James' Sq.
- Richard Erby & Co., 46 College Green.
- J. & C. Foster, 81 Wells Road.
- Gulver & Bradburne, 67 Whiteladies Road.
- Harris & Tozer, 140 Wells Road.
- Hunt & Phillips, 1 North St.
- Huntley & Co., 79 West St.
- James & Short, 26 College Green.
- Janner & Co., 163 Ashley Road.
- Jolly & Son, 40 College Green.
- Jones & Son, 56 Wine St.
- E. McCarthy, 19 Queen's Road, Clifton.
- T. Pakeman & Son, 2 Whiteladies Road.
- Rawle & Co., 3 Repton Road, Brislington.
- J. F. Taylor & Son, 32 College Green.

HUDDERSFIELD.

Wholesale clothiers:
- Bairstow Sons & Co. (Ltd.), Fitzwilliam St.
- Brook Sugden & Co. (Ltd.), Page St.
- Haighs (Ltd.), St. John's Road.
- W. S. Haigh & Co., 3 Byram St.
- Firth & Carr, 2 St. John's Road.
- George Crosland, 17 Chancery Lane.
- Samuel Taylor & Co., Prospect St.
- Denton Lee & Co., 17 Dundas St.
- France & Preston, 14 John William St.
- Geo. Sykes & Co., Cloth Hall St.
- Morton Bros., Cloth Hall St.
- Alfred Willis, 70 John William St.
- Wrigley & Tinker, Alfred St.
- Chilton Wrigley & Co. (Ltd.), Green St.
- Hirst, Kettlewell & Co. (Ltd.), 2 Dundas St.
- Murdock, Thompson & Co., 5 St. John's Road.
- Wilkinson & Thompson, 28 Market St.

HULL.

Importers and wholesalers (dry goods and trimmings):
- Samuel Laughton, Market Place.
- Hudson, Smith & Co., King St.
- Foster & Co., Silver St.
- Moss & Co., Waterhouse Lane.

EUROPE—Continued.

UNITED KINGDOM—Continued.

HULL—Continued.

Retail dry goods merchants (direct importers):
- Thornton Varley & Company, Prospect St.
- Bladons (Ltd.), Prospect St.
- Marris, Willows & Smith, Whitefriarsgate.

LEEDS.

Wholesale button dealers:
- Crowe & Co., Wellington St.
- I. J. & G. Cooper, St. Paul's St.
- Holt & Co., St. Paul's St.
- Robert Gill, 14 Basinghall St.
- Avison, Hare & Co. (Ltd.), 44 Wellington St.
- Ashworth, Brown & Co. (Ltd.), West St.
- A. R. Bennett, 19a Wellington St.
- Bell, Bond St.

Importers and likely importers:
- C. H. Powel, 32 St. Paul's St.
- Star Agency Co. (Ltd.), 5 Bedford St.
- P. J. & J. R. Smith, 5 King St.

LEICESTER.

Jobbers and agents for foreign firms:
- T. Firth & Co., King St.
- Butterworth & Co., 4 Town Hall Lane.
- Faire Bros., Humberstone Road.

LONDON.

Button importers:
- William Williams & Son (Ltd.), Bread St., E. C.
- Weintraud Sons & Co., Wells St., E. C.
- Olney Amsden & Sons, Falcon St., E. C.
- Cook Son & Co., St. Paul's Churchyard, E. C.
- Pawsons & Leafs, St. Paul's Churchyard, E. C.
- Richard Evans & Co., Watling St., E. C.
- Rylands & Sons (Ltd.), Wood St., E. C.
- S. Thompson & Son., Wood St., E. C.
- Hitchcock Williams & Co., St. Paul's Churchyard, E. C.
- Copestake Crampton & Co., Bow Churchyard, E. C.
- Bartrum Harvey & Co., Gresham St., E. C.
- Speyer, Schwerdt & Co. (Ltd.), Golden Lane, E. C.
- C. & J. Weldon, Cheapside, E. C.

LONDON—Continued.

Agents who take orders from samples:
- Guitermann & Co., 35 Aldermanbury, E. C.
- Fowler & Orr, 55 Knightrider St., E. C.
- C. W. Bartholomew, 2-8 Falcon St., E. C.
- Gradden & Co., 5 Falcon St., E. C.
- M. H. Webber, 2 Lilypot Lane, E. C.
- M. Wilson of W. G. Thomas, 3-4 Little Love Lane, E. C. (temporary address, 101 Wood St., E. C.).
- Robert Johae & Co., 37-38 Gutter Lane, E. C.
- Henry W. Koehler, 10 Wood St. Sq., E. C.
- Frederick Newton & Co., 8 and 9 Hamsell St., E. C.
- Petit & Co. (Ltd.), 1 Upper James St., Golden Sq. W.
- Rominger Welsh & Co. (Ltd.), 46 Queen Victoria St., E. C.
- Ippolito C. Strazza, 50 Aldermanbury, E. C.

MANCHESTER.

Agents selling from samples, manufacturers' account:
- Carver & Roberts, 38 George St.
- Crampton, E. & Co., 12 Little Lever St., and possibly
- H. Vollmer & Son, 41 Spear St.
- Thomas Gledhill, 4 Short St.

Agents selling from samples, agents' account:
- H. Vollmer & Son, 41 Spear St.

Jobbers, wholesalers, or importers:
- Parry Sons & Hanson (Ltd.), 70 Cannon St.
- W. Prince & Son (Ltd.), 14 New Brown St.
- S. & J. Watts, Portland St.
- Beaumont Bros (Ltd.), Corporation St.
- J. P. Levey, 13 Rook St.

Tailors' and dress-trimming houses:
- Parry Sons & Hanson (Ltd.), 70 Cannon St.
- W. Prince & Son (Ltd.), 15 New Brown St.
- Beaumont Bros. (Ltd.), Corporation St.

Wholesale warehousemen:
- Pugh Davies & Co., 29 Dale St.
- G. Peak & Co. (Ltd.), 9 Portland St.
- Rylands & Sons (Ltd.), New High St.
- J. Pendlebury, 30 Thomas St.

EUROPE—Continued.

UNITED KINGDOM—Continued.

NEWCASTLE.

Wholesale dealers:
- W. Adler & Co., 126 Westgate Road.
- Eagle Sons & Co., Westgate Road.
- Cooperative Wholesale Society (Ltd.), West Blandford St.
- Bainbridge & Co. (Ltd.), Market St.

NOTTINGHAM.

Jobbers and agents for foreign firms:
- Jonathan Page & Co., Long Row and Market St.
- Frederick William Gray & Son, 2 Pilcher Gate.
- W. F. Newell, 34 High Pavement.
- Snook & Co., Houndsgate.

PLYMOUTH.

Wholesale dealers:
- Britannia Clothing Works.
- Rundle, Rogers & Brooks.
- Lancaster & Co.
- Tippett & Co.
- Butt, Vosper & Knight.
- Spooner & Co.
- Popham, Radford & Co.

PORTSMOUTH.

Jobbers and wholesalers:
- Martin & Sons (Ltd.).

SOUTHAMPTON.

Jobbers and wholesalers:
- F. J. Trippe & Sons (Ltd.).

CARDIFF, WALES.

Wholesale dealers:
- Finlay, Jenkins & Co., St. Johns Sq.
- Batho, Taylor & Ogden, St. Johns Sq. (wholesale millinery, buttons incidental).

SWANSEA, WALES.

Wholesale dealers:
- Enoch & Co. (Ltd.), Waterloo St.
- Morgan Jenkins & Co., Waterloo St.

EDINBURGH, SCOTLAND.

Jobbers:
- Thomas Cooper & Co., 45 Jeffrey St.
- Wm. Kirkhope & Sons, 18 Hanover St.
- J. J. Richardson & Co., 54 George St.
- A. Ward & Co., 25 Hanover St.
- A. McCracken & Co., 13 Rose St.
- J. T. Brown & Co., 13 George St.
- Arthur & Co., 20 Waterloo Place.

EDINBURGH—Continued.

Trimming, small ware, and fancy warehouses (wholesale):
- Glen, Johnston & Co., 19 South St., David St.
- Richard Evans & Co. (Ltd.), 25 North Bridge.
- James A. Robertson, 8 North Bridge.
- James Cullen, 147 Buccleuch St.

GLASGOW, SCOTLAND.

Wholesale warehousemen:
- Barrie & Dick, 118–124 Queen St.
- Arthur & Co., 78 Queen St.
- Mann Byars & Co. (Ltd.), 12 Argyle St.
- Stewart & MacDonald (Ltd.), 146 Argyle St.

Importers:
- George Melville, 14 Princes Square (works, Pollokshaws, Glasgow).
- Sands & Graham (Ltd.), 48 Miller St.

Button factors:
- Wm. & T. B. Brown, 25 Gordon St.

BELFAST, IRELAND.

Shirt factories:
- John Fulton & Co. (Ltd.), 6 Ormeau Ave.
- Lindsay Bros. (Ltd.), 7–9 Donegal Place.
- Bulloch & Co., 29 Adelaide St.
- McIntyre, Hogg, Marsh & Co., 22–24 Church St.
- Murphy & Orr, 18 Donegal St.
- New Hope Street Factory, 5 Hope St.
- Ulster Shirt & Collar Co., 86 Bankmore St.

Custom shirt makers:
- John Arnott & Co., 14–24 Bridge St.
- H. Berrington & Co., Ormeau Ave.
- Irish Shirt Manufacturing Co., 1–45 Castle St.
- Lowry & Officer, Donegal St.
- John Wilson & Son (Ltd.), 12 May St.

CORK, IRELAND.

Importers and clothing manufacturers:
- T. Lyons & Co. (Ltd.), 20 South Main St.
- Dwyer & Co. (Ltd.), 24 Great George St.
- Booth & Fox, Lavitt's Quay (shirts).
- J. J. Meehan & Sons, 7 Merchants Quay (overalls).

EUROPE—Continued.

UNITED KINGDOM—Continued.

CORK, IRELAND—Continued.

Shirt makers:
- Munster Arcade, 29 Patrick St.
- Alexander Grant & Co., 52 Patrick St.
- Queen's Old Castle, 85 Grand Parade.
- Cash & Co., 18 Patrick St.
- J. W. Dowden & Co., 113 Patrick St.
- London House, 14 Patrick St.
- F. Allman & Co., 2 Winthrop St.
- Fitzgerald & Son, 44 Patrick St.
- J. Hill & Son, 25 Grand Parade.
- Lawson & Son, 11 King St.
- T. O'Gorman, Victoria Building, King St.
- William J. O'Sullivan, 11 Grand Parade.

Mr. James Dwyer, 29 Marlboro St., Cork, would be a good general agent to handle buttons for Munster.

LONDONDERRY, IRELAND.

Shirt makers:
- Bayer, Charles & Co., Foyle Road.
- J. J. Carton & Co., Rossville St.
- Edward Doherty, Abercorn Road.
- Thos. Gibson, Rossville St.
- Grant, Sommerville & Co., Prince Arthur St.
- James Hamilton, John St.
- Hogg & Mitchell, James St.
- Kennedy & Co., Great James St.

LONDONDERRY, IRELAND—Continued.

Shirt makers—Continued.
- Lloyd, Attre & Smith, Great James St.
- Alexr. Mills, Strand Road.
- D. A. Mooney, Foyle St.
- Austin Moore, Strand Road.
- Porter & Acheson, Carlisle Road.
- Young & Rochester, Waterside.
- Welch, Margetson & Co., Carlisle Road.
- Tillie & Henderson, Foyle Road.
- Shields (Ltd.), Society St.

VALETTA, MALTA.

Importing stores:
- Carmelo Callus.
- Paolo Portelli.
- S. Abela & Figli.
- Carmela Anastasi.
- P. P. Moore.
- V. Galea di Antonio.
- E. Scicluna & Figli.
- Giovanni Sapiano.

Commission houses:
- P. Cutajar & Co.
- Michele Darmanin.
- Degiorgio & Azzopardi.
- Valentini & Portelli.
- Gambin & Casolani.
- Giuseppe Darmanin.
- Hammer & Thomson.
- W. Pariente.

ASIA.

CHINA.

CANTON.

Commission houses:
- Shewan, Tomes & Co. (British).
- H. E. Arnhold (British).
- Deacon & Co. (British).
- Cary & Co. (American).
- E. D. Miller (American).

HONGKONG.

Commission houses:
- W. R. Loxley & Co.
- Harry Wicking & Co.
- W. G. Humphreys & Co.
- Vieria & Co.
- Silva-Netto & Co.
- Alex. Ross & Co.

Women's clothing:
- Fairall & Co.
- Lane, Crawford & Co.
- Wm. Powell (Ltd.).
- The Bon Ton.
- J. T. Shaw.
- Madame Flint.
- Madame Casulli.
- Whiteaway, Laidlaw & Co.

HONGKONG—Continued.

Men's clothing:
- J. T. Shaw.
- Wm. Powell (Ltd.).
- Tak Cheong.
- Sincere & Co. (Ltd.).
- The Sun Co. (Ltd.).

Retail stores:
- Wm. Powell (Ltd.)
- Tak Cheong.
- Whiteaway, Laidlaw & Co.
- The Sun Co. (Ltd.).
- Sincere & Co. (Ltd.).
- MacIntosh & Co.

MUKDEN.

Agents (selling from samples, agent's responsibility):
- Mitsui Bussan Haisha.

Importers:
- Geo. L. Shaw Bros.

NEWCHWANG.

Importers:
- A. Van Ess & Co.
- E. S. Leeds.

ASIA—Continued.

CHINA—Continued.

SHANGHAI.

Importing houses:
- Markt & Co. (Ltd.) (American).
- American Trading Co. (American).
- Slowe & Co. (British).
- Walter Nutter & Co. (British).
- Reiss & Co. (British).
- Cecil Holliday & Co. (Ltd.) (British).
- Edward Wheen & Sons (British).
- William Little & Co. (British).
- Melchers & Co. (German).
- Arnhold, Karberg & Co. (German).
- Kamp & Co. (German).
- Meyerink & Co. (German).
- Carlowitz & Co. (German).
- Kirchner & Boger (German).
- Diederichsen, Jebsen & Co. (German).
- Siemssen & Co. (German).
- Reuter, Brockelmann & Co. (German).

SHANGHAI—Continued.

Importing houses—Continued.
- Slevogt & Co. (German).
- L. Soyka (Austrian).
- Austrian Import & Export Co. (Austrian).

Department stores (with mail-order business in other ports):
- Whiteaway, Laidlaw & Co. (Ltd.) (British).
- Lane, Crawford & Co. (Ltd.) (British).
- Hall & Holtz (Ltd.) (British).
- Weeks & Co. (Ltd.) (British).

TIENTSIN.

Importers:
- Arnhold, Karberg & Co.
- Ralph Harper & Co.
- Eduard Meyer & Co.
- Geo. Crofts & Co.
- Okuma & Co. (Ltd.).

FRENCH INDO-CHINA.

SAIGON.

Importers:
- Berthet, Charriere et Cie.
- E. Biedermann & Co.
- Diethelm & Co.
- Dumarest et Fils.

INDIA.

CALCUTTA.

Commission agents (importing on dealer's account):
- Allen Bros. & Co. (Ltd.), 1 Royal Exchange Place.
- G. Atherton & Co., 8 Clive Buildings.
- Ghosh, Mitter & Co., 2–4 Radha Bazar Lane.
- Grandage & Co., 2 Clive Row.
- J. F. Kendrew & Co., 3 Commercial Buildings.
- Joosub Peer Mahomed & Co., 21 Pollock St.
- K. E. Sadka, Mehta Buildings, Canning St.
- Sen Pundit & Co., 59 Bentinck St.
- Siddessur, Son & Co., 33 Canning St.
- Stanley Oakes & Co., 6 Mangoe Lane.

KARACHI.

Button dealers:
- Hoar & Co.
- Karachi Stores.
- Karachi Supply (Ltd.) (best quality buttons).

KARACHI—Continued.

Button dealers—Continued.
- Whiteaway, Laidlaw & Co. (Ltd.).
- Bombay Stores.
- Haji Abu Bucker & Sons (best quality buttons).
- Buchal Esmail & Sons (best quality buttons).
- Haji Ayub Khamisa.
- Haji Karim Mohamed Shariff.
- Kassim & Co.

MADRAS.

Commission merchants:
- Chas. H. Parsons & Co., First Line Beach.
- Alexander & Co., Second Line Beach.
- T. A. Taylor & Co., Armenian St.

Bazaar dealers:
- A. T. T. Nomanbhoy & Co., 223–226 China Bazaar Road.
- Salay Mahomed Hajee Ebrahim & Co., China Bazaar Road.

ASIA—Continued.

JAPAN.

TOKYO.

Importers and wholesalers of buttons exclusively:
  K. Okada, Minami Demma Cho, Kyobashi, Tokyo.
General importers:
  Sale and Frazar, 1 Yayasu, Kojimachi-Ku, Tokyo.
  J. A. Fenner, 1 Owari-Cho, Itchome, Ginza, Tokyo.

YOKOHAMA.

General importers:
  American Trading Co., Yokohama.
  Patton, McKenzie & Co., 26 Yamashita Cho, Yokohama.
Tailors who might import buttons:
  Arthur & Bond, 38 Yamashita Cho, Yokohama.

JAVA.

BATAVIA.

Importers:
  Behn, Meyer & Co.
  George Wehry & Co.
  Handelsvereeniging Java.
  Indische Handels Compagnie.
  Internationale Crediet en Handelsvereeniging Rotterdam.
  B. van Leeuwen & Co.

BATAVIA—Continued.

Importers—Continued.
  G. Meijlink.
  Niederer & Co.
  Pitcairn, Syme & Co.
  Handelsvereeniging voorheen Reiss & Co.
  Société Coloniale Indo-Belge.

PERSIA.

TEHERAN.

Importers:
  Magasin Hollandais.
  Comptoir Francais.
  H. M. Ismail Kiachif et Frères.
  Mirza Hassan Frères.

TEHERAN—Continued.

Importers—Continued.
  H. A. Wekili & Co.
  Hadji Ali & Bros.
  H. Zia & Co.
  Hasan Agha Teheranji.

STRAITS SETTLEMENTS.

SINGAPORE.

Importers:
  Katz Bros.
  Behr & Co.
  Robinson & Co.

SINGAPORE—Continued.

Importers—Continued.
  Wolskel & Co.
  John Little & Co. (Ltd.).

TURKEY.

BEIRUT.

Importers:
  B. Audi et Cie.
  Establissements Orosdi-Back.
  Faukehnel & Schifner.

CONSTANTINOPLE.

Commission agents:
  Gebr. Springer, Stamboul, Constantinople.
  Victor Schnur, Altiparmak Han, Stamboul, Constantinople.
Tailors' trimming houses (wholesale):
  M. Breitner, Pera, Yuksek Kalderim.
  Albert Gunzburg & F. Grunstein, Pera, Yuksek Kalderim No. 69.

HAIFA.

Importers:
  Moise Bercoff.
  Pewsner & Kahan.
  Struve & Beck.
  Otto Fisher.
  Schmidt & Co.
  Raphul Hakim.

SMYRNA.

Agents selling from samples, manufacturer's account:
  Constantin Th. Chaniotis.
  Demosthenis Diamandides.
  Joseph Tchohadjian.
  Robert Kraemer.
  Jamafta & Constantinides.
  Jacques Nahoum.
  Nissim Isacoff.

ASIA—Continued.

TURKEY—Continued.

SMYRNA—Continued.

Jobbers and wholesalers:
- Etablissements Orosdi-Back.
- Les Fils Errera.
- Société Ottomane d'Anatolie.
- P. Xenopoulo & Co.
- Anglo-Eastern Cooperative Co. (Ltd.).
- Nicolas De Andria.
- Bazar d'Orient.
- Daniel Levy.
- Nissim Pontremolli.
- Jacob Modai & Fils.

TRIPOLI, SYRIA.

Importers (before the war):
- Akel & Farrah.
- George Khayat.
- Nicolas Amiouni.
- Hani Nahas.

AFRICA.

EGYPT.

ALEXANDRIA.

Agent (sells on manufacturer's responsibility):
- Leon Nacmias, 6 Rue de France.

Jobbers:
- Orosdi-Back.

Men's tailors:
- London house, Rue Sesostris.
- Phillips & Lawrence, Rue Cherif Pacha.
- Mauro Gallo, Rue Adib.
- F. Benedetto, Rue Cherif Pacha.
- Ed. Kurk & Co., Rue Rosette.
- Davies Bryan & Co., Rue Cherif Pacha.

Women's tailors:
- London house, Rue Sesostris.
- Phillips & Lawrence, Rue Cherif Pacha.
- Mme. Adele Zanobette, Rue Toussoun Pacha.
- Mlle. Rita Fummo, Rue Nebi Daniel.
- C. Cabanes, Rue de l'Eglise Copte.

Dry goods stores with women's tailoring departments:
- Grands Magasins Chalons, Rue Cherif Pacha.
- Grands Magasins Hannaux, Place Ste. Catherine.
- Grands Magasins Sednaoui, Place Mehemet Aly.
- Stein's Oriental Stores, Place Mehemet Aly.
- Baladi Frères, Rue Cherif Pacha.

Retail stores with merchant tailor department:
- G. J. Anlyan, Rue de France.
- M. Debbas, Rue Nubar Pacha.
- G. N. Lainas & Co., Rue Mosquee Attarine.
- Wakid & Sons, Rue Cherif Pacha.
- Baladi Freres, Rue Cherif Pacha.

CAIRO.

Men's tailors:
- V. Bercovitz, 11 Chareh Madabegh.
- R. Braticevich, 39 Chareh el Madabegh.
- J. Collacott & Son, Chareh Maghrabi.
- Davies Bryan & Co., St. Davids Building.
- V. d'Elia, 13 Chareh Maghrabi.
- High Life Tailor, N. Rousso, Chareh Kamel.
- F. Phillips & Co., Chareh Kasr el Nil.
- H. Wybrow & Co., Chareh el Manakh.

Women's tailors:
- Davies Bryan & Co., St. Davids Building.
- High Life Tailor, N. Rousso, Cherah Kamel.
- Madame Levi, Chareh Boulac.
- F. Phillipps & Co., Chareh Kasr el Nil.
- Sandberg, Chereh Emad el Dine.

Dry goods stores with women's tailoring departments:
- Chemla Frères, Chareh Boulac.
- Cicurel Fils, Chareh Boulac.
- Steins Oriental Stores (Ltd.), Ataba el Khadra.
- Davies Bryan & Co., St. Davids Building.
- Orosdi-Back, Chareh Abd el Aziz.
- F. Frances, Chareh Emad el Dine.
- Sednaoui & Co. (Ltd.), Midan Khazendar.
- Progres, Chareh el Gawhari.

Retail stores with merchant tailor department:
- Orosdi-Back, Chareh Abd el Aziz.
- Chemla Frères, Chareh Boulac.

AFRICA—Continued.

EGYPT—Continued.

CAIRO—Continued.

Retail stores with merchant tailor department—Continued.
- Sednaoui & Co. (Ltd.), Midan Khazandar. Steins Oriental Stores (Ltd.), Ataba el Khadra.
- Cicurel Fils, Chareh Boulac.
- A. Mayer & Co., Mousky Street.
- Palacci Fils, Haim & Co., Chareh Mousky.

KONGO.

(Correspondence should be in French.)

BOMA.

Button dealers:
- Valle et Cie.
- Hatton & Cookson (Ltd.) (headquarters, 3 Mersey St., Liverpool, England).
- C. Nava et Cie.
- Niewe Afrikaansche Handels Vennootschap.

ELIZABETHVILLE.

Button dealers:
- Mercantile Anversoise.
- Comptoirs du Katanga.
- Pieters et Cie.

KINSHASA.

Button dealers:
- African Association.
- Dr. G. Dryepondt.
- Société La Comfina.

MADAGASCAR.

TAMATAVE.

Importers and retailers of dry goods and notions:
- P. H. Golaz (stationery and notions, retail).
- A. Bachel (stationery and notions, retail).
- A. Dauphin (dry goods and notions, retail).
- Affeejee Mamode et Cie (dry goods and notions, wholesale and retail).
- Amode Khan (dry goods and notions, wholesale and retail).

Dressmakers:
- Madame Raphel.
- Madame Vve. Hoareau.

TANANARIVE.

Importers, wholesalers, and retailers of general merchandise:
- Ulysse Gros et Darrieux (also 9 Place du Champ de Mars, Bordeaux, France).
- Haugou, Allain et Cie. (also 73 Rue du Faubourg Poissonniere, Paris, France).
- A. Navarre (retail only).

Tailors:
- Henri-Louis Dumarty.
- Alexandre Paoli.

Dressmaker:
- Madame Vve. Louise Miecaze.

UNION OF SOUTH AFRICA.

CAPE TOWN, CAPE PROVINCE.

Wholesale importers (selling also from samples):
- John Garlick, 18–20 Adderley St.
- Eaton Robins & Co., 74–76 Burg St.
- Fraser & Co., 4 Burg St.
- Stuttaford & Co., 62–70 Adderley St.
- Cleghorn & Harris (Ltd.), Adderley St.
- Fletcher & Co., 4 Darling St.
- Brown, Lawrence & Co., 76–86 Barrack St.
- Wm. Spilhaus & Co., 58 Strand St.
- J. W. Jagger & Co., St. Georges St.
- H. Jasper, Smith & Co., Trafalgar Place.

Agents selling from samples, manufacturers' responsibility:
- Frank Witton, Bakers Building.

CAPE TOWN, CAPE PROVINCE—Contd.

Agents selling from samples, manufacturers' responsibility—Continued.
- E. Harrison, 73 Long St.
- W. J. Somerville, Duncan's Chambers.
- H. Havelock Stephens, Atkinson's Chambers.
- W. Bayman, P. O. Box 320.

Department stores (direct and indirect importation):
- John Garlick, 18–20 Adderley St.
- Stuttaford & Co. (Ltd.), 62–70 Adderley St.
- Cleghorn & Harris, 42–46 Adderley St.
- Wilson & Miller, 54–56 Adderley St.
- W. Duncan & Co., 82–84 Adderley St.
- Fletcher & Co., 4 Darling St.

AFRICA—Continued.

UNION OF SOUTH AFRICA—Continued.

EAST LONDON, CAPE PROVINCE.

General wholesale importers:
- Baker, King & Co.
- Dyer & Dyer (Ltd.).
- Dunn & Co.
- Mosenthal & Co.
- J. W. Jagger & Co.
- Morum Bros.
- J. W. Weir & Co.

Department stores:
- Gibberd, Bryant & Co.
- Whitakers (Ltd.).

GRAHAMSTOWN, CAPE PROVINCE.

General wholesale importers:
- Fitchat & Co.
- Irving & Co.
- Wood Bros.
- Albany Farmers Depot.

KINGWILLIAMSTOWN, CAPE PROVINCE.

General wholesale importers:
- Baker, Baker & Co.
- Baker, King & Co.
- Dyer & Dyer (Ltd.).

OUDTSHOORN, CAPE PROVINCE.

General wholesale importers:
- Prince Vincent & Co.
- A. Stusser & Co.
- Kenner & Co.
- Johnson & Dalton (Ltd.).
- Hudson, Vreede & Co.

PORT ELIZABETH, CAPE PROVINCE.

General wholesale importers:
- Hirsch, Loubser & Co.
- M. Mosenthal & Co.
- Stephen, Fraser & Co.
- Hannam & Co.
- J. W. Jagger & Co.
- Dunell, Ebden & Co.
- Dreyfus & Co.

Department stores (dressmaking):
- Marshall & Co.
- Cleghorn & Harris.

QUEENSTOWN, CAPE PROVINCE.

General wholesale importers:
- Haddad Bros.
- Marshall, Baillie & Co.
- Morris & Morris.
- Peacock Bros.
- Morum Bros.

DURBAN, NATAL.

Wholesale general merchants:
- Randles Bro. & Hudson.
- S. Butcher & Sons.
- Parker, Wood & Co. (Ltd.).

DURBAN, NATAL—Continued.

Wholesale general merchants—Contd.
- Steel, Murray & Co.
- Garlick & Co.
- W. Dunn & Co.
- Harvey, Greenacre & Co.
- W. G. Brown & Co.

Tailors' supplies:
- A. W. Wright & Co.

Dry goods and department stores:
- Norman Anstey & Co.
- Bargain Drapery Store.
- Bon Marché.
- Cartter-Holwill & Co.
- J. Downing.
- Harvey, Greenacre & Co.
- Henderson & Co.
- D. McDonald.
- Wm. Noyes & Co.
- Jno. Orr & Co.
- F. A. Stow.

BLOEMFONTEIN, ORANGE FREE STATE.

Wholesale dry goods merchants:
- C. W. Champion, 44 Maitland St.
- G. A. Fichardt (Ltd.), 17 Upper Church St.
- Garlick & Co., 95 St. Andrews St.

Department stores:
- Cartter-Holwill, 47 Maitland St.
- Chudleigh Bros., 24 Maitland St.
- Dalldorf Bros., 28 Charles St.
- Sowden & Stoddard, 116 Maitland St.

BULAWAYO, RHODESIA.

Wholesale dry goods merchants:
- Bechuanaland Trading Association, Eighth Ave.
- Garlick & Fortune, P. O. box 197.
- Haddon & Sly, P. O. box 582.
- Meikle Bros., P. O. box 61.

SALISBURY, RHODESIA.

Wholesale dry goods merchants:
- Bechuanaland Trading Association, P. O. box 49.
- Haddon & Sly, P. O. box 428.
- Meikle Bros., P. O. box 297.
- Rhodesia Trading Co. (Ltd.), P. O. box 95.

JOHANNESBURG, TRANSVAAL.

Wholesale dry goods merchants:
- Beatley & Co., corner Market St.
- Garlick & Holdcroft, corner President and Kruis Sts.
- J. W. Jagger & Co., corner Harrison and President Sts.
- Mosenthal Bros. (Ltd.), corner Market and Kruis Sts.
- Rand Trading Co. (Ltd.), 89 Market St.

AFRICA—Continued.

UNION OF SOUTH AFRICA—Continued.

JOHANNESBURG, TRANSVAAL—Contd.

Wholesale dry goods merchants—Con.
- Randles Bros. & Hudson, corner Market and Van Brandis Sts.
- Starfield & Starfield, 134 Market St.
- Stuart Campbell (Ltd.), 136 Marshall St.

Department stores:
- Stuttaford & Co. (Ltd.), corner Rissik and Pritchard Sts.
- Churleigh Bros., corner Eloff and Pritchard Sts.
- Norman Anstey & Co., corner Joubert and Kerk Sts.
- Blinman, Holwill & Islip, corner Eloff and Kerk Sts.
- Harvey, Greenacre & Co., Rissik St., near Pritchard St.
- John Orr & Co., Pritchard St.
- Store Bros., corner Eloff and President Sts.
- T. W. Beckett & Co., President and Harrison Sts.
- Belfast Warehouse Co., 110 Market St.

PRETORIA, TRANSVAAL.

Wholesale dry goods merchants:
- A. Johnson & Co., 261 Church St.
- B. Pein & Co., 258 Church St.
- Schlosberg & Katzenellenbogen, —— Church St.
- Mahomed Hajee Joosub, 306 Church St.

Department stores:
- T. W. Beckett & Co. (Ltd), 290 Church St.
- John Jack (Ltd.), 302 Church St.
- Henwood Son, Soutter & Co., 285 Church St.
- A. Johnson & Co., 261 Church St.
- Store Bros., 270 Church St.
- H. W. Williams & Co., 245 Church St.
- Wm. Miller & Co., 231 Church St.
- Lilienfield & Co., corner Pretorius and Van der Walt Sts.
- M. Kessel & Co., 99 Church St.

OCEANIA.

AUSTRALIA.

MELBOURNE.

Dry goods stores:
- Hicks, Atkinson & Co., 348 Collins St.
- Robertson & Moffatt, 328 Bourke St.
- Buckley & Nunn, 298 Bourke St.
- The Mutual Store, 256 Flinders St.
- Bussell Robson Pty. (Ltd.), 246 Bourke St.
- Myer's, 314 Bourke St.
- Stephens & Sons, 330 Bourke St.
- Stainer & Co., Swanston St.
- Foy & Gibson, 130 Smith St., Collingwood, Melbourne.
- J. F. Treadway & Co., 154 Smith St., Collingwood, Melbourne.
- Stirling & Sons, Bridge Road, Richmond, Melbourne.

Clothing manufacturers:
- Albion Clothing Factory, cor. Weston and Charles Sts., Brunswick.
- Beath Schiess & Felstead, 198 Flinders Lane.
- Denniston & Co., 95 Flinders Lane.
- Davies Doery & Co., 98 Flinders Lane.
- Foy & Gibson Pty. (Ltd.), 109 Oxford St., Collingwood.
- Goldstein, Barnet, 129 Flinders Lane.
- Phoenix Clothing Co., 347 King St.

MELBOURNE—Continued.

Clothing manufacturers—Continued.
- J. & B. Sniders, 318 Flinders Lane.
- Wallace & Shorter, 27 Russell St.
- Willis & Taylor Pty. (Ltd.), 124 Flinders Lane.
- Commonwealth Government Clothing Factory, Miles St.
- Alexander, Brodziak & Co., 271 Flinders Lane.
- L. Cohen & Co., 275 Lonsdale St.
- G. W. P. Creed Pty. (Ltd.), 192 Lit. Collins St.
- Ellis, Robertson & Peddie, 16 Guildford Lane.
- Forster & Co. Pty. (Ltd.), 165 Flinders Lane.

NEWCASTLE.

Importers and wholesalers:
- D. Cohen & Co.

SYDNEY.

Warehousemen:
- Alcock Bros. (Ltd), York and Barrack Sts.
- Borsdorf & Co., 89 York St.
- Henry Bull & Co., cor. York and Market Sts.

OCEANIA—Continued.

AUSTRALIA—Continued.

SYDNEY—Continued.

Warehousemen—Continued.
- Debenhams Pty. (Ltd.), 42–44 York St.
- Paterson, Laing & Bruce, Wynyard St.
- Joseph Pickles & Sons, 91 York St.
- Robert Reid & Co., 32–34 York St.
- Sargood Bros., 83 York St.
- Alex. Stewart & Sons, Holt House, York St.
- W. E. Ward & Co., 72 Clarence St.

Department stores:
- Anthony Hordern & Sons, Brickfield Hill.
- Grace Bros., Broadway, Glebe.
- F. Lassetter & Co., 403 George St.
- Farmer & Co., cor. Pitt and Market Sts.
- David Jones (Ltd.), cor. George and Barrack Sts.
- Mark Foys (Ltd.), cor. Castlereagh and Liverpool Sts.

HOBART, TASMANIA.

Importers and wholesalers:
- Baily & Co.
- Hooper & Harrison.

Selected list for consideration of American exporters:
- Agencies Limited (strictly agents).
- Brownell Bros.
- Hooper & Harrison.
- Baily & Co.
- Smale Bros.
- George White.
- G. P. Fitzgerald.

LAUNCESTON, TASMANIA.

Importers and wholesalers:
- P. O. Fysh & Co.

Selected list for consideration of American exporters:
- Ludbrooke's.
- F. E. Burbury.
- Pepper & Sons.

NEW ZEALAND.

AUCKLAND.

Indent agents:
- John Allen.
- G. H. Baker & Co. (Ltd.).
- H. P. Burry.
- F. E. Colledge.
- Martyn H. Jansen.
- H. E. Cooper & Co.
- James Payne.
- W. S. Daniel.
- G. H. Davies & Co.
- Connelly Bros.
- J. P. Hooton.
- W. J. Rainger.
- McNeil & Co.

Wholesale dry goods merchants and clothing manufacturers:
- Ross & Glendining (Ltd.).
- J. M. Morran (Ltd.).
- Abbott, Foote & Jones.
- Arch. Clark & Sons (Ltd.).
- Macky, Logan, Caldwell (Ltd.).
- Sargood Son & Ewen (Ltd.).
- James Hodgson.
- New Zealand Clothing Factory.
- Arthur W. Smith.

CHRISTCHURCH.

Indent agents:
- Robert Malcolm (Ltd.).
- Reynolds & Kinvig.
- J. Brown.
- W. Sewell.
- W. Fenner.
- R. P. Manning.
- E. H. Tate & Co.
- W. Johnson.

CHRISTCHURCH—Continued.

Wholesale dry goods merchants and clothing manufacturers:
- Sargood Son & Ewen (Ltd.).
- Bing, Harris & Co. (Ltd.).
- Ross & Glendining (Ltd.).
- Butterworth Bros. (Ltd.).
- Macky, Logan, Caldwell (Ltd.).
- Arch. Clark & Sons (Ltd.).
- Kaiapoi Woolen Manufacturing Co. (Ltd.).
- Grummitt & White.
- T. Wilson & Co.
- Ubique Clothing Co.

DUNEDIN.

Indent agents:
- Neill & Co. (Ltd.).
- Mercer & Mitchell.
- Jas. Brown & Co.
- Mirams Bros.
- Hayward & Garratt.
- Hayman & Co. (Ltd.).

Wholesale dry goods merchants and clothing manufacturers:
- Bing, Harris & Co. (Ltd.).
- Butterworth Bros. (Ltd.).
- Hallanstein Bros. (Ltd.).
- Mosgiel Woolen Factory Co. (Ltd.).
- Ross & Glendining (Ltd.).
- Sargood Son & Ewen (Ltd.).

WELLINGTON.

Indent agents:
- Miller & Ahearn.
- A. Corrigan & Co.
- Dawson & Maudsley (Ltd.).

OCEANIA—Continued.

NEW ZEALAND—Continued.

WELLINGTON—Continued.

Indent agents—Continued.
- Fraser Ramsay (N. Z.) (Ltd.).
- A. E. Kernot.
- R. L. D. Kidston.
- R. E. Sinclair.
- J. Nathan & Co. (Ltd.).
- Gollin & Co. Pty. (Ltd.).
- A. M. Holmes.
- R. B. Collins & Co. (Ltd.).
- Lieber & Fauvel (Ltd.).

Wholesale dry goods merchants and clothing manufacturers:
- Wellington Woolen Mfg. Co. (Ltd.), Petone.
- Ross & Glendining (Ltd.).
- Abbott, Oram & Co.
- Bing, Harris & Co. (Ltd.)
- N. Z. Butterworth Bros. (Ltd.).
- Arch. Clark & Sons (Ltd.).
- Geo. Doughty & Co.
- McEldowney Bros.
- Macky, Logan, Cadlwell (Ltd.).
- N. Z. Roberts (Ltd.).
- Sargood Son & Ewen (Ltd.).
- Henry Donkin.
- C. H. Bird.
- Cathie & Sons (Ltd.).
- Colonial Clothing Factory.
- Crown Clothing Manufacturing Co. (Ltd.).
- A. Levy.
- New Zealand Clothing Factory (Ltd.).

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DEPARTMENT OF COMMERCE
BUREAU OF FOREIGN AND DOMESTIC COMMERCE
E. E. PRATT, Chief

SPECIAL CONSULAR REPORTS—No. 76

PROPRIETARY MEDICINE AND OINTMENT TRADE IN CHINA

BY

THOMAS SAMMONS
Consul General, Shanghai, China

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PROPRIETARY MEDICINE AND OINTMENT TRADE IN CHINA.

INTRODUCTION.

No country offers a richer field for the proprietary-medicine trade than China. Hygiene is practically unknown among the Chinese, and the sickness and suffering to which the masses are subject on account of the lack of efficient native remedies or treatment is probably greater than in any other country. This is especially true of all varieties of skin diseases, against which no native salves or blood tonics seem effective. Competent foreign or foreign-trained physicians are few, and hospitals are unknown except in or near treaty and trade ports.

RECENT DEVELOPMENT OF TRADE.

Ten years ago the proprietary-medicine trade in China was hardly worth mentioning, although foreigners had been laboring for 20 years or more to develop it, but immense strides have been made since then and ample profits have been realized, although the trade may still be said to be in its infancy.

Through judicious and persistent advertising the natives are gradually being educated to the necessity of paying some intelligent attention to their various ailments and are responding remarkably well. For this reason it should not be difficult to introduce a good article at a reasonable price, if supported by the right methods of advertising, and thus obtain a foothold in what now seems destined to become within the next decade the world's greatest market for proprietary medicines.

PRESENT SALES SYSTEMS.

There are now as many as six American and English patent-medicine houses and one Japanese house established in China. These either have headquarters in Shanghai, with branch organizations extending all over the country, or send out traveling representatives who cover the field thoroughly by periodic trips. These houses and a few others working on a small scale are all engaged in the sale of their own brands and are not open for any proposal for the sale of other medicines.

However, some patent-medicine houses that have no organizations of their own in the field do a thriving business through old established houses in the general import business that have special departments under the management of experts for handling special lines. Several of these firms are particularly well fitted to care for the patent-drug trade because of their large organizations extending all over China, and in some cases penetrating to hitherto almost inaccessible points in the interior. The efficiency of these foreign agents is materially enhanced by having patent-medicine departments under the management of men thoroughly familiar with the requirements of the trade both in Western and Oriental countries.

The American and English firms may be said to have obtained no more than a foothold in China, but the receipts of the Japanese concern are estimated to be nearly equal to those of all the other foreign firms combined. The success of this company is no doubt due in part to the superior facilities which the Japanese have in China by virtue of similarity of language, racial characteristics, and business methods; but this company has spared no pains, either in canvassing or publicity campaigns, to exploit thoroughly and systematically the whole of China, so that even in remote interior sections it is difficult to escape the familiar poster extolling the virtues of "Jintan."

ADVERTISING.

Since the selling of patent medicines has proved to be successful largely, if not wholly, to the extent that well-planned advertising creates a demand, and thus ultimately gives the manufacturer maximum returns with a minimum expenditure, it may be advisable first to consider and analyze various methods of publicity to determine which produce the quickest results in China.

Generally speaking, judicious advertising produces the same effect on the Chinese as on the Western mind. There is, indeed, a tendency in China toward a quicker response to a concentrated, well-executed advertising campaign than in Western countries, probably because the Chinese habitually take notice of even the smallest fact that comes under their observation, think it over, and discuss it. Comparatively few Western firms have gone in for vigorous and well-organized publicity in China, chiefly because of the prevailing but erroneous notion that the Chinese are too illiterate to warrant the expenditure of even the smallest sums for advertising foreign goods in the native press, but there is an inviting field for manufacturers who are willing and able to introduce their products through the vernacular press and by other methods of advertising calculated to reach the masses. It is positively asserted by one American, who reaped a rich harvest of orders after a good publicity campaign, that with sufficient advertising anything at all within reason can in time be profitably introduced to the Chinese trade.

VERNACULAR NEWSPAPER PUBLICITY.

Excluding foreign newspapers, printed in English and circulating chiefly in the small community of foreigners here and consequently not of much service in reaching the native population, there are about 130 newspapers in China, printed in Chinese and published by Chinese concerns, that are suitable for advertisements.

A campaign in these 130 papers would practically cover the whole country, but it is not necessary, and in some cases not even advisable, to exploit the whole of China at once.

China can roughly be divided into four sections, each of which can be handled separately for publicity or distribution. The northern section, extending north of Kiangsu Province through the Province of Chihli into Manchuria, has about 40 of these native newspapers; the central section, extending from Shanghai through the Yangtze Valley into Tibet, also has about 40; the southern section, extending from Hongkong up to the border of Burma, has about 30; and the Manchurian section, leading through Manchuria as far as Urga, in Mongolia, has 20.

NEWSPAPER CIRCULATION AND RATES.

Some Peking, Tientsin, Hankow, Shanghai, and Hongkong papers have circulations of upward of 25,000 copies, but the average circulation of the papers in interior towns and of the less important papers in the capital and in the treaty ports seldom exceeds 5,000 to 6,000 copies. However, these figures do not represent the actual number of readers, since, in the interior especially, newspapers go from hand to hand. In the larger cities there is a regular collection of distributed newspapers for subsequent resale in outlying towns.

Newspaper advertising in China is comparatively inexpensive and is customarily based on rates for daily insertions, contracts being made and paid for monthly.

In the northern papers, including the important Peking dailies, space for daily advertisements 1 inch by 9 inches can be bought at an average price of about $1.90 per paper per month.

In the Central China papers, except for those in Shanghai, the average rate for advertisements of the same size for daily appearance would be about $1.65 per paper per month.

The Shanghai dailies, the most important and influential in China, are fairly expensive, the average price for similar advertisements in the six leading papers being about $3.50.

In the southern papers, including the influential Hongkong and Canton papers, space can be bought at an average rate of $1.85 per paper per month.

As stated, these rates are for advertisements 1 inch by 9 inches. To calculate the price of a half-page advertisement, the above prices should be multiplied by 13, since, with few exceptions, a half page in Chinese newspapers is 13 by 9 inches. Of course, these prices can not be guaranteed, as many contracts have to be specially bargained for and there is, besides, a tendency in Chinese newspaper circles to raise rates.

PREPARATION OF COPY AND ELECTROTYPES.

Electrotypes can be made cheaper here than abroad. Shanghai especially has printing plants where the finest kind of designing, printing, lithographing, engraving, and block-making is being done by efficient and capable Chinese experts who have the finest and the most modern machinery at their disposal. Designs should be used wherever possible and should be made by Chinese artists here so as to suit Chinese taste.

These drawings should always embody the trade-mark, or "chop" as it is called in China, and great care should be exercised to see that this design is never modified in the slightest degree. One firm lost almost a half-year's business by using a new label plate which printed the clouds in a landscape that the old worn-out plate had long failed to bring out. The firm experienced such difficulty in attempting to convince the trade that the label was the same and not that of a spurious article, that it was finally decided to have another new plate made which omitted the clouds that had caused the trouble.

It is quite unnecessary to have blocks made of the whole advertisement. While in all cases printed examples showing the type desired should be sent to the papers, it is sufficient to supply only the block for the illustration and to leave it to the papers to follow the type indicated or, what is still better, to supply woodcut characters for the specially large type. These characters are cut at very little expense by all printing works. As a rule, the papers follow the instructions with regard to setting very carefully, and voucher copies are handed in regularly at the end of every month with debit notes, thus facilitating the accurate keeping of an advertisement account.

The quality of the Chinese paper is so poor that none but first-class zinc plates or electros should be used for reproduction. Half-tone blocks are out of the question.

Newspapers in the vernacular are sold in the streets or sent to subscribers' houses, if desired. The best papers seldom cost more than 2 cents a copy sold in the street, or 40 cents per month delivered daily at the house.

POSITION OF ADVERTISEMENTS.

The position of advertisements in the Chinese papers also deserves considerable attention on the part of the advertiser. The front page, except for the name of the paper, is usually devoted to advertisements only. These are the usual short theater, business, want, loss, and similar announcements and command the highest rates. Whether this position is worth the price is a point on which advertisers differ. The very best position obtainable appears to be the inside of the first page, which, with the exception of a small space for advertising, is exclusively devoted to Government news, local news, and foreign telegrams. Special rates have to be paid for this position. One sheet of the paper is always exclusively reserved for editorial news and no advertisements are allowed on that sheet. For the rest, advertisements are inserted, as nearly as possible, in accordance with the wishes of advertisers, i. e., alongside or surrounded by reading matter, although this, of course, depends on the space available and the nature of the contract. There are also unfavorable positions in the Chinese papers which should be avoided.

Generally speaking, it is desirable to support newspaper publicity in China by as many other methods of publicity as circumstances warrant, according to the nature of each case and the desirability of obtaining certain and quick results, but it is possible to create a demand through newspaper advertising alone, provided, of course, that the campaign is judiciously planned, well carried out, and supplemented by efficient distribution.

It is essential to open every important newspaper campaign according to Chinese tastes and ideas. Once the product has been introduced and is well known there is no objection to following Western copy more closely, but the introductory copy should appeal forcibly to the Chinese taste. It is highly important to avoid too much exaggeration, as the average Chinese is phlegmatic and sensible.

TRANSLATIONS.

Although the spoken language is entirely different in various sections of China, there is but one written language for all China and this is understood throughout the country. This fact can not be too strongly emphasized, as the general impression among American manufacturers seems to be that differences in dialects constitute an insurmountable barrier to a widespread advertising campaign.

For translations none but the very best Chinese experts, who realize the importance of addressing the masses in a popular yet dignified style, should be employed. Failure to have translations prepared by trained men has frequently resulted in errors which caused the advertising house to be held up to ridicule, thus entirely defeating the purpose of the advertisement. The translation of patent-medicine literature, whether for labels, wrappers, circulars, or general advertising matter, can only be done efficiently by Chinese specialists trained in this kind of work, who know what to emphasize and what to avoid, under the supervision of foreigners who are thoroughly familiar with the requirements of each case.

BOOKLETS AND TESTIMONIALS.

If intelligent attention is given to the preparation of suitable booklets containing the necessary reading matter splendid results may be obtained through this medium.

There are several ways of organizing a booklet distribution in China, but house-to-house distribution, well organized and well controlled, still seems to be the best method. About 5,000,000 booklets are necessary to cover the principal centers in China.

The whole make-up and the printing of booklets, calendars, or other pictorial Chinese advertising matter should be done in China. Many otherwise cleverly conducted campaigns have failed through "home arrangements" of these all-important matters, despite the fact that this work can all be done here under the supervision of foreign and Chinese experts, usually at a considerably lower price.

Testimonial advertising has met with success in China, as the Chinese are just as grateful as other human beings if they have obtained relief from a long-standing ailment, and many spontaneous letters of gratitude are received daily by leading patent-medicine firms here.

CALENDARS.

No form of advertising is more popular with the Chinese than an attractive calendar issued toward Chinese New Year (about the middle of February). The Chinese calendar takes the form of a scroll and is of considerable value for advertising purposes, since the Chinese are eager to have a pictorial calendar in their homes all year round for the purpose of discovering "lucky" or "unlucky" days for weddings, funerals, and other affairs. The calendar is usually displayed in a conspicuous place in the home all through the year, so there can be no doubt that this form of advertising is one of the best that can be devised. Calendar distribution requires a very large quantity of calendars, at an average price of not less than $0.12

Mexican ($0.06 U. S.) for a well-finished and attractive design, hence this form of publicity is fairly expensive, but most advertisers have lately gone in for it. The favorite design for calendars used to be an illustration of an old classic tale, but now the Chinese prefer a girl picture either in semi-Western or Chinese dress.

OTHER FORMS OF ADVERTISING.

Handbills are an inexpensive and effective method of reaching the masses, and as the Chinese seldom throw away anything, a thorough distribution of handbills is more to be expected in China than in Western countries.

The use of electric signs is constantly increasing not only in treaty ports but even in fairly remote interior towns, and some of the signs in Shanghai are quite as imposing and attractive as any seen in Western countries. Space for window displays and signboards can easily be arranged for, and trained demonstrators can also be engaged to explain the merits of medicines while distributing small samples to those interested.

In almost all the treaty ports and in many inland towns motion pictures are rapidly becoming a very popular form of entertainment and attract large crowds of the better classes. Slides advertising various articles are often displayed, and occasionally enterprising manufacturers have had films displayed illustrating processes of manufacture and methods of using products. Such films are highly educational and only too rarely seen.

A very popular form of advertising, limited at present to a few seaports such as Tientsin, Shanghai, and Hongkong, is the display of posters in street cars. Billposting is another favorite method of advertising in China, but results are uncertain unless it is carried out on a very large scale, in which case it will, of course, be expensive. For publicity of this sort it is necessary to have a large, well-designed poster in attractive colors, a billposting staff, and rented rights for wall or boarding space.

DISTRIBUTION AND SALES.

Although the whole subject of publicity in China is practically inexhaustible, the main features have been touched upon and it is now desirable to revert to the conditions of distribution and sales.

In former years distribution was a serious problem because of the lack of adequate means of transportation, but traffic conditions in China have improved so that rapid, safe, and economical distribution is now possible. In fact, China does not differ greatly from any Western country so far as the necessities of a business like the handling of a patent medicine are concerned.

The actual number of medicine shops in China is unknown, but they are to be found in every town of any size and carry other commodities as well as medicines, especially prepared foodstuffs. The patent-medicine trade is, however, confined to the activities of about 300 leading drug stores, some of which are conducted very efficiently by foreign-trained physicians, and in nearly all cases by well-qualified chemists.

The drug and patent-medicine trade has always been a flourishing one in China, especially for the retailer. The trade seems always ready to cooperate with the manufacturer who attempts to introduce a new line that promises to be profitable, especially if the first parcel is supplied on consignment terms.

ADVANTAGES OF CONSIGNMENTS.

It is not absolutely necessary for the first parcel to be supplied on consignment terms, but this course greatly facilitates the rapid introduction of a new brand. There are some proprietary medicines already on the market, so the possible profit must be sufficient to tempt the Chinese dealers to push the sale of a new article on their own account or else inducements and helps must be offered to assist them in making sales. As there is little use in advertising without a readily available supply to meet the demand thus created, the stocking of small lots with various druggists in a certain territory on a consignment basis, followed by any or all of the publicity schemes above mentioned, seems to be the most successful plan yet tried.

Naturally, if the American firm in China intrusted with the introduction of a new proprietary medicine can meet with the desired success more rapidly by an initial consignment of goods to Chinese distributers, followed up with an advertising campaign, than by any other method now attempted, the American manufacturer seeking to enter the China market should not ask its agent to bear the entire risk and responsibility, but should rather seek to cooperate to the fullest extent in the introduction of the article. If the agent must, because of prevailing conditions, distribute stocks by consignment, the least that the manufacturer can do is to consign goods to the agent until a sufficiently steady demand can be created to minimize any risk of loss to either manufacturer or agent. If the agent is prepared to offer the manufacturer the service of a complex and efficient publicity organization, built up by years of arduous, pioneer effort, the serious seeker for a foreign outlet for his products will not hesitate to assume his share of the initial expense.

The advantage of stocking the goods first in leading drug stores in approximately 80 of China's natural distributing centers lies in being able immediately to meet the demand that will have been created by advertising. Much valuable time, energy, and money can be thrown away by merely waiting for sample orders to come in to the import house instead of having already met the anticipated demand.

TERMS OF CREDIT AND PRICES.

In filling orders from these drug stores, which might be said to be of comparatively sound financial standing, for normal requirements credits up to 60 days are usually allowed by the foreign import house handling the agency. In rare instances the Chinese stores order direct from manufacturers, but unless the manufacturer has a representative on the ground to assist in settling all questions that might arise it is not to the advantage of either the American shipper or the Chinese dealer to attempt direct trade. Just as in dealing with firms in ports of entry in China, f. o. b. port of shipment quotations are receiving less and less consideration and quotations c. i. f.

port of arrival are being insisted upon, so more and more the Chinese dealers in the interior are demanding quotations in fixed prices, including all charges paid to destination. While such quotations are impracticable for the manufacturer, import houses in China are able to meet this growing requirement with some degree of satisfaction, thus rendering almost indispensable services as intermediaries. This condition of affairs has been recently brought about by the change in the sales methods of the large treaty-port "hongs."

Whatever arrangements may be made between the manufacturer and the agent in China, it is necessary to allow for a trade discount or margin of profit of 25 to 30 per cent off the retail selling price. Discounts usually vary according to quantities sold but should not be less than 20 per cent off the retail price.

Protection of retail selling prices is out of the question, since the Chinese are past masters in the art of bargaining, no matter how small the amount or what they buy, and in many cases 50 per cent of the trade discount is given away by selling under fixed and advertised prices.

RECENT CHANGES IN TRADE METHODS.

It was formerly, and with many firms of non-American nationality still is, the practice to wait for the Chinese trade to come to the "hong," or import house, instead of going out after it. Merchants traveled for many weeks and over thousands of miles to get to the big ports and place their orders with foreign import firms operating only in these ports. Within recent years improved transportation conditions have made it possible, at the same time that keen competition has made it imperative, to go out into the interior and bid for the Chinese trade.

Chinese buyers are now beginning to await the arrival of the foreign traveling salesmen who are combing the country for orders that formerly almost went begging. Some foreign firms use Chinese salesmen, but thus far their success does not begin to compare with that of their less at home but infinitely more energetic and businesslike confrères.

These salesmen, who in many instances have beaten out pioneer trails to rich interior markets that were not even marked on their maps, have returned to the treaty-port "hongs" with full and accurate information regarding trade routes, not otherwise obtainable even from Chinese official sources. With this constantly increasing volume of dependable information stamped in the experience of the sales force, but seldom reduced to written form, it is now possible for treaty-port "hongs" to meet changing conditions of trade in a manner that the manufacturer seeking direct trade with the interior can hardly ever hope to equal.

The Chinese market presents certain difficulties not found in other markets, but, on the whole, the successful introduction of proprietary medicines simply requires sound judgment, experience, knowledge of conditions, and, above all, persistence. The details of arrangements depend upon the particular line to be launched. In an energetic sales campaign reliable American import houses in China can and do render most valuable assistance.

In case an individual representative is sent out, or if a man residing in China and already acquainted with Oriental methods and procedure is selected, he should be a man of even temper, not irritable, and patient under all conditions. A highly nervous man traveling in the interior of China would not prove satisfactory. The representative chosen should, by all means, be able to speak more than one language; a knowledge of English, French, and German would be serviceable to a traveler throughout the interior, especially if he had the aid of a good Chinese interpreter speaking the northern dialect, Mandarin.

It is unwise to inaugurate any extended campaign unless the goods to be handled are to be had in the nearest and most convenient distributing centers to fill orders with. A quick delivery is one of the first essentials of a successful campaign.

As in Western countries, a mail-order business in patent medicines is exceedingly difficult to obtain, and in fact offers very few advantages compared with the possibilities of the ordinary trade channels.

OTHER FEATURES OF INTEREST.

There is room for all kinds of proprietary-medicine preparations in China, provided, of course, that such medicines are reasonably efficacious for the ills for which they are recommended. In this respect the Chinese are perhaps more critical than any other nation, and are very sensitive about spending money without adequate returns. The goods should be put up in an attractive manner and retailed at a moderate price.

The Chinese prefer medicines prepared in tablet or pill form, although several liquid medicines have met with success, notably palatable tonics with medicinal properties. Some liquid preparations can be put up also in tablet form, and this should be done whenever possible.

It sometimes happens that advertising is not necessary. In some sections of the Orient where means of communication are few, news of the efficacy of a certain new medicine has been known to travel far and fast, and large sales have been made in a surprisingly short time as a result of word-of-mouth recommendation alone. This factor is an important one even in countries where there is every facility for a publicity campaign on a large scale, and is not to be overlooked in the China trade.

TRADE-MARKS AND CUSTOMS TARIFF.

Before advertising or pushing any article it should be fully protected by registered trade-mark. Further, all articles should be submitted to a good Chinese scholar for selection of the Chinese characters to be used in forming various names, as each Chinese character has a name, a meaning, and a pronunciation so that when used collectively to form a name a combination of characters may sometimes have a very ridiculous or vulgar meaning, which would prevent the articles from receiving their due recognition.

The import duty on both medicines and advertising matter is 5 per cent ad valorem, to which 5 per cent of the duty so levied is added for conservancy and wharfage dues, making a total effective duty of 5¼ per cent. There are no other restrictions upon publicity or sales in China.

LIST OF DEALERS AND IMPORTERS.

A list of drug stores, dealers, and importers of patent and other medicines in Shanghai may be obtained from the Bureau of Foreign and Domestic Commerce or its district and cooperative offices by reference to file 82090.

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DEPARTMENT OF COMMERCE
BUREAU OF FOREIGN AND DOMESTIC COMMERCE
B. S. CUTLER, Acting Chief

SPECIAL CONSULAR REPORTS—No. 77

TURKISH MARKETS FOR AMERICAN HARDWARE

By

G. B. RAVNDAL
Consul General, Formerly at Constantinople, Turkey

PRICE, [illegible] CENTS
Sold by the Superintendent of Documents, Government Printing Office
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WASHINGTON
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From
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LETTER OF SUBMITTAL.

Department of Commerce,
Bureau of Foreign and Domestic Commerce,
Washington, September 20, 1917.

Sir: There is submitted herewith a report on Turkish markets for American hardware, prepared by Consul General G. B. Ravndal, at Constantinople. This may be regarded as supplementing the series of 10 monographs recently published by the Bureau, covering the hardware trade of Russia; Germany, the Netherlands, and Scandinavia; France, Algeria, and Morocco; Italy, Spain, and Portugal; the Far East; Australia; Argentina, Uruguay, and Paraguay; Brazil; Chile and Bolivia; and Peru. Those books were prepared, on a uniform plan, by special investigators working under the supervision of the United States commercial attachés. The present report has been prepared on the initiative of Consul General Ravndal, but it is similar to the others in scope and purpose. It has been conceived and written on the basis of normal conditions in world trade, and has reference to the American opportunity after the war.

Consul General Ravndal makes the point that American manufacturers are not fully aware of the opportunity afforded by the Turkish market or of the popularity already attained there by certain of their hardware products. If, after the termination of the war, they enter this field with the requisite energy, perseverance, and knowledge of local conditions, it is believed that the outlook is distinctly promising. American effort in the past has not been sufficiently thorough or sustained, and, in addition, it has been hampered and thwarted because of the intervention of German jobbing houses between the American maker and the Ottoman merchant. Such firms have been primarily concerned with the advancement not of American but rather of German trade.

This report affords an illuminating insight into the methods employed by German interests in their commercial penetration of the Ottoman Empire. Their endeavors have been determined and adroit, and have been rewarded with a large measure of success. Systematic "dumping," extensive imitation of patented American articles, and a persistent and carefully organized solicitation of the trade have been salient features in the German campaign to dominate the Turkish markets and link them firmly to the industrial activities of the Teutonic nations.

Taking up each of the principal lines of hardware, Consul General Ravndal discusses the distinctive local characteristics, the types that are ordinarily desired, and the position of the several manufacturing countries. It is believed that his report will enable American exporters to prepare for an effective entry into the Turkish field after the restoration of peace, with a view to establishing for themselves the place to which they are manifestly entitled by the quality and utility of their wares.

Respectfully,

B. S. CUTLER,
Acting Chief.

To Hon. WILLIAM C. REDFIELD,
Secretary of Commerce.

TURKISH MARKETS FOR AMERICAN HARDWARE.

I. INTRODUCTION.

Hardware is admittedly one of the lines in which American goods have acquired a distinctive character of excellence. That the Turkish market should have felt the influence of this superiority is not surprising, but what may surprise even American hardware manufacturers is the important position their product has gained in Turkey, solely on its own merits. Many of them are probably unaware that their goods are sold there, and few of them realize that, in ordinary times, the Turkish market imperatively demands their articles, that of all shelf hardware sold in Turkey fully 60 per cent is sold as American, that about 20 per cent actually is American, and that an utterly insignificant part of it is sold direct to Turkey. The holding of 20 per cent of a country's business in a given line, without the least effort to obtain it, is a fact that commends itself to the careful consideration of all those whose wares are involved. The possibilities to which such conditions point will be discussed in the present report.

GERMAN HOUSES AS INTERMEDIARIES.

With so favorable a basis, the absence of a strong, healthy growth of business will puzzle all those who are not familiar with the numerous adverse factors with which American trade has to contend in this particular line. The removal of these obstacles lies entirely in the hands of the American manufacturers themselves. As in the case of various other important lines, American hardware is not sold by the American producer to the Turkish distributer.

Turkey's imports of American hardware have been practically monopolized by a few firms in Hamburg and Bremen. These concerns have houses in New York, but it would be erroneous to consider them as American export organizations. They are German jobbers, working according to German methods and for German interests. Thus American articles are shipped to Turkey only if they can not be replaced on the same terms by German articles. This tutelage over the American hardware business with Turkey, if not checked, must inevitably result in diminishing our trade, as the German middlemen command a number of essential advantages. They handle all kinds of hardware, and by means of large contracts with the various manufacturers they manage to secure for themselves exceptionally low prices. For the shipment of these large quantities to their free port zone, they obtain from the German steamship companies reduced rates, so that the combined freight from New York to Hamburg and thence to Constantinople is lower than the direct freight charge from New York to Constantinople. In this business the Hamburg-American Line and the Deutsche Levante Line, both under the same control, work in complete harmony. Were an American factory to ship direct only its own goods, they would, in most cases, amount to so little that the minimum freight rate would have to be paid, where larger quantities might have been shipped for the same price. Further, the shipment of an order involves certain handling charges at the port of shipment and at the port of transshipment. A small order can not as well afford these charges as a transaction on a more extended scale.

SPECIAL CATALOGUES IN FRENCH FOR LEVANTINE TRADE.

Most American manufacturers usually distribute catalogues in English, whereas the German houses furnish catalogues in French, which is the current business language in Turkey. The selection of the goods is thus facilitated. These catalogues are often specially printed for the Levant, with prices in francs, and often bear the Turkish distributer's name on the cover. They contain a complete list of hardware goods. In some cases the American articles are shown on one page and the German imitation on the opposite page, with the advantages of price, quick delivery, etc., of the German goods conspicuously indicated.

GERMAN IMITATIONS OF AMERICAN PRODUCTS.

The Germans, who have acquired the reputation of being master imitators, are thus offering for sale devices and tools that are very close imitations of patented American products, the imitation proceeding even to the brand and name of the article. For instance, there is offered in Turkey the "Blosta" drill, which is an exact duplicate of an American tool. This duplicate is sold by the firm of Carl Blombach, of Ronsdorf, Germany, one of the principal German tool firms operating in the Turkish market.

In each case the German product is, in appearance, a true reproduction of the American article, with a considerable reduction in price. That the Germans keep the American article in the catalogue at all must be ascribed to the fact that there are people who appreciate the excellence of the American product, in spite of all manipulations and deceptions, and insist on having what they want. That the articles are not completely imitated is probably due to the fact that they are patented in Germany. However, American manufacturers should be warned of the existing danger of seeing complete imitations of their products turned out by the Germans and sold in Turkey, where their rights, in the majority of cases, have not been protected by patents. That the Germans are alert on the question of patents in Turkey may be inferred from the following list of patents awarded from January 6, 1915, to February 4, 1916: To Germans, 11; to Ottomans, 3; to Austrians, 3; to Americans, 2; total, 19.

EFFECT OF GERMAN PRICE CUTTING.

Another factor militating against American imports is the German method of "dumping," not so much for the purpose of disposing of surplus stock as of destroying competition. The factory representatives in such emergencies make no offers, but merely carry the orders away by allowing 5 to 10 per cent discount on the lowest competitive price. A specific instance is related by local dealers in steel rivets. These goods were formerly imported from France and England. Then there appeared on the market the representative of a German newcomer, the Kronprinz Aktiengesellschaft für Metallindustrie, with works at Ohligs and Immingrath. The prices ruling at the time were as low as 30s. per 100 kilos (220 pounds) c. i. f. Nevertheless, the German cut the price until both the English and French withdrew and he carried off the order at 16s. Contrary to what one might believe, this practice not infrequently meets with disapproval and mistrust on the part of the trade. The price of rivets has rapidly risen since the French and English withdrew, and considering the quality they are more expensive now than before. This is but one case out of many. The control of the pick trade was acquired in a similar way, all producers in Germany forming a syndicate to drive out competition.

LOCAL REPRESENTATIVES AND ORGANIZATION.

The German houses, with their thorough understanding of the prerequisites to the successful introduction of their various articles, select first-class agents, intimately familiar with the market's requirements and the customs and character of the people. These agents are by no means always Germans, but they are invariably German in spirit and predilection and have been carefully taught German methods. They are thus linked to a perfectly organized succession of elements, all working to the same end.

The steady increase of German commerce with Turkey is due in very large measure to this model organization, which starts with the furnishing of capital by the home bank to the small manufacturer against his Turkish customer's notes, proceeds to facilitate the shipment of the goods exported, by land as well as by sea, by granting reduced combined railroad and steamship rates, and finally, through its exterritorial banks, supplies to the Turkish importer the funds necessary for releasing the merchandise and selling it, thus enabling the latter to honor the initial notes. In this connection prominent mention must be made of the Deutsche Levante Line, the stock of which is held by all important German banks and whose steamers call at many ports along the Dutch, Belgian, and Mediterranean coasts, generally obtaining a full cargo and thus making possible low freight rates for German goods. In addition to the above advantages, a system of through bills of lading has been devised by which manufacturers in interior towns of Germany pay the same freight rates on their goods destined to the Levant via Hamburg as are paid by manufacturers situated on the seaboard. This is a valuable incentive for the manufacturers in all parts of Germany to seek export trade with the Levant, as it places them on an equal footing with their colleagues in the port towns. Another important feature of the system is that the Deutsche Levante Line has an agent in every manufacturing town, who is also an insurance and forwarding broker, and in these several capacities he takes the goods from the factory and attends to the formalities required by all the carriers, whose authorized representative he is himself. Thus it is seen that in every possible way German goods enjoy a preferential position, and American shipments via Hamburg to the Levant have been known to wait for weeks in Hamburg warehouses, while German goods have been hurried forward.

The agents of the German houses, as already mentioned, work methodically. If they are general commission agents (which is the rule), they have a bright young man, a native, looking after the hardware branch only. He visits the clients daily, reports the arrival of competing salesmen, and is always ready to take new orders, be they ever so small, because the aggregate quantity ordered by all dealers invariably reaches a respectable figure. In this work great assistance is rendered by the traveling salesman from Germany, who comes twice a year, examines local market conditions closely, makes price reductions where necessary, and in general encourages the dealers. A competitor is never allowed to gain headway. Not a single instance is known in which a German traveling representative failed to obtain an order from every dealer he visited, though he may have had to call four or five times on the same man.

The English and French salesmen admit that they are unable to obtain the same results. It is believed in Turkey that only American alertness, perseverance, and organization will be able to cope with German adroitness on this score. Especially during the past six years a colossal effort has been made by Germany to capture the Turkish hardware trade, or, better perhaps, to drive out the English and French competitors. The result has been cheaper prices, but also lower quality, which in the end renders the goods more expensive. On the whole, the dealers do not favor the German system, but they are obliged to accept it or go out of business.

Another factor is the protection given to the German agents by the German embassy. Any claim or difficulty with the Turkish authorities is promptly settled by the intervention of the German diplomatic representatives.

ADVANTAGEOUS POSITION OF GERMAN JOBBERS.

The principal houses supplying American hardware or imitations of it are: Markt & Co., connected with Hammacher, Delius & Co., Hamburg; Aug. Egers, Bremen; E. Grell, Hamburg; Carl Blombach, Ronsdorf. Other German houses are: Stahlschmidt, Ronsdorf; Aug. Herm. Hollman, Ronsdorf; Braun & Co., Ronsdorf. Most of the Ronsdorf firms are small, mainly selling German products on so little profit that they can not grow. The first-mentioned jobbers of the Hanseatic ports, on the contrary, are powerful and control the entire Levant and possibly other markets. Unlike their inland colleagues, they make large profits dealing in American hardware. It has been proved by subsequent direct imports that an American pipe tool has been sold in Constantinople for double the price it actually cost in New York. Such overcharges are more prejudicial to the manufacturer than to the Levantine consumer, for the latter may turn to an English or French firm for a good tool, or buy a cheap one of German make, while the American manufacturer loses the trade. At equal prices, numerous American articles excel the German, and this may explain why American articles are found on the Turkish market at all.

The local representatives have entered into contracts with the Hamburg and Bremen houses not to import direct from the factories, and the German jobbers in turn have contracts with the manufacturers. Whether these contracts include exclusive sales rights in Turkey or some similar clause is not known in Constantinople; such a condition does not appear very likely, for all the houses mentioned can furnish articles of the same make, usually from stock and very seldom by shipment direct from New York. However, whether such an arrangement exists as yet or not is immaterial, in view of existing practices, because quotations by the factory direct are often higher than those of Hamburg, besides exacting cash with the order, delivery at the factory or in New York, etc. Under such circumstances the most favorable inclination toward America is discouraged. Only in late years, since the organization of the American Chamber of Commerce for the Levant, have a few American factories granted representation to local agents. The latter, though perhaps perfectly honest, are, in some instances, second-class agents, without means, personal influence, or credit, so that they are exposed to all kinds of quibbling on the part of a dealer who, knowing their financial position, may refuse to accept his order upon arrival of goods on some whimsical pretext or other, solely for the purpose of obtaining a rebate at the last moment. A first-class agent would simply release the documents himself and probably sell the goods to the very man who refused them, if the prospective purchaser had dared to attempt any such practice with him. While the previously mentioned German agents, about four in all, do a business amounting to $300,000 a year in Constantinople alone, the present direct agents of American firms accomplish but little. One of the agents, representing a Hamburg jobber and an interior German firm as well, uses the American articles only in order not to lose trade when he can not sell the German products.

The local trade, knowing it is paying more in Hamburg, is none the less willing to buy the article there rather than direct, for the manufacturer would at best agree only to cash against documents, whereas in Hamburg the purchasers get long credit. Small firms, especially, are only too eager to buy from the Germans, for in the lapse of six or eight months they can dispose of their goods and perform another transaction with the money, before they have to pay the original bill. The latter includes all charges incurred by the goods, which are sold c. i. f.

ESSENTIAL QUALIFICATIONS OF AGENTS.

It is thus seen that one of the cardinal requisites for the successful introduction of hardware, in which line competition is very keen, is the choice of the agent. The latter, especially in the Turkish market, should know how to sell and to whom to sell—that is, his object should be not merely to secure an order by cutting the prices or giving away part of his commission, perhaps, but to promote among the buyers an appreciation of business relations with his firm and to sell its goods to people who will keep the values high and not depreciate them on the market by reselling with next to no profit. Such agents may be found in Constantinople, but they must be assured of reasonable and constant support in the introduction of the new brands. A factory seeking to conquer a territory at home would not shrink from making various sacrifices in the way of advertising, meeting the buyer in regard to terms, special inducements in prices, and the like. In this respect the Turkish market is not different from the home market. American files of a certain make are sold there, not because they are skillfully introduced but because German files are dearer. Even Belgian and French files sell below the German.

Such few direct representatives as exist are not able, for some reason or other, to obtain tangible permanent results. To handle the articles successfully, the agent must bring to bear on the situation a good reputation, which means personal influence with the customer, and at the same time an understanding of the American point of view. The poor success of direct dealings hitherto may be partly ascribed to shortcomings in these respects, although the principal drawback always remains the flanking competition from Hamburg.

GENERAL OUTLOOK FOR AMERICAN HARDWARE.

It can not be urged too strongly that American manufacturers should not neglect what may appear to them as a limited or secondary market. In the past Turkey has been in a state of industrial depression, but it is regarded as certain that this condition will be removed by the present war, and the hardware business will inevitably advance with any general revival. The demand will be both pressing and growing. The United States must be ready to respond. Various factors have arisen in favor of America, and the end of the war will probably reveal a condition most auspicious for a development of the importation into Turkey of American hardware.

It is true that the steel business, of which the manufacture of tools is a part, is the backbone of the German manufacturing industry, and the war has apparently not shaken it within the boundaries of the Empire. But it is doubful whether Germany will be able to meet foreign competition abroad on the same ground as before the war. Local importers appear skeptical on this question and are strengthened in their belief by discouraging advices received from the German manufacturers. At present, with export prohibition on nearly every article, prices are announced to be from 50 to 150 per cent higher than before the war, and when the prohibition is removed a further increase is anticipated.

Although in some hardware lines German goods, before the war, represented 90 per cent of the total, in general the share of the various countries may be indicated as follows: Germany, 60 per cent; United States, 20 per cent; England, 10 per cent; France, 7 per cent; other countries, 3 per cent.

There is noticeable a strong tendency for the German and the American share to increase, Germany leading with cheap grades, suited to the low standards in Turkey, and the United States with improved devices. Belgium had started to compete effectively against the German articles when the war broke out. In former years, England and France dominated the market. Various Sheffield factories, the Peugeot works, and firms in Maubeuge and Lille have still had their old-time customers, though their business is shrinking from year to year. Aside from the moral effect the war may have on future commercial relations between Turkey and its present enemies, the devastation of the northern districts of France, the home of this industry, has crippled that country's trade for some time to come. The destroyed factories, even if rebuilt immediately, will probably not be able to supply on the same price level as before and will certainly have to discontinue whatever credit they had been extending.

Even Germany, it is announced, will not be able to maintain its credit policy when peace conditions return. German manufacturers have advised their agents that they believe business after the war will be transacted in a manner "not unlike the practices ruling before the war." This vague explanation has created the impression that credits will be limited and connected with a corresponding increase in prices, so that those who can pay cash will have a material advantage over such competitors as do not have command of large funds. This certainly is a condition that will bring the Turkish market closer to American practices.

This anticipated inability of Germany to extend long-time credit after the war, the destruction of the principal hardware factories of France, and the complete exhaustion of all hardware stocks, because of requisition for military purposes and the long duration of the war, all combine to create exceptional conditions favorable to America's entrance into this field on a larger and more substantial basis than ever before. Turkish merchants will look to the American manufacturer for goods to replenish their stocks, because of the prospect of immediate delivery and reasonable prices, and the American Chamber of Commerce for the Levant offers means whereby American manufacturers and dealers can get in touch with reliable agents in Turkey in order to seize and maintain this opportunity after the war.

II. TOOLS.

In the investigation of the market in Turkey for American tools, it was found that about equal numbers of wood and metal working tools are sold. Cheap tools are in the greatest demand, because of the low standards of the native workmen, but this condition will probably change with the economic development of the country that is expected after the war. This question of grade should not, however, be overlooked by the American manufacturer who is contemplating exporting to the Levant, as Germany's success in this field is partly due to the attention given this factor by the agents of German firms.

FILES.

Files rank first in quantity among American tools imported into Turkey; they have to compete against Globe files of English make, French Peugeot files, and a German file marked "Sheffield." The Swiss file is not a competing element, as it is imported in limited quantities for special work and is too high priced to be a favorite on this market. Cast-steel files in fine, medium, and bastard cut are in demand in the proportions of 10, 15, and 75 per cent, respectively. About 50 per cent are triangular, single cut; 25 per cent are half round, double cut; 20 per cent are flat square, double cut; and the remainder are warding files, double cut, round files, double cut, and square files, double cut.

Orders are usually placed twice a year, of which the following is an example: No. 3, 150 files; No. 3½, 500; No. 4, 500; No. 4½, 100; No. 5, 300; No. 6, 200; No. 7, 300; No. 8, 150; No. 9, 30; No. 10, 15. Nos. 12, 14, 16, and 18 are also in demand, but in small quantities. The total yearly imports of files and rasps for Constantinople are estimated at $90,000. Because of the absence of factories, files are used by nearly every worker in Turkey, and a great many metal articles, especially in the interior of the country, are handmade, as, for instance, faucets, copper cooking utensils, and charcoal stoves. The Turkish brass art workers are also important consumers.

There is also imported, chiefly from Europe, a low-grade file, sold by weight and packed one, two, three, and four in a package, which always weighs 900 to 1,000 grams (31.7 to 35.3 ounces). The following order is given three times a year by one Constantinople firm for these cheap files, which are used for cast-iron filings and other rough work: 50 packages with one file per package; 150 packages with two files per package; 300 packages with three files per package; 50 packages with four files per package. A common practice is to make special brands for important customers. Quotations are in shillings or francs.

SAWS.

It is stated by Constantinople dealers that, of all imported tools, saws have the best chance of a substantial increase in sales. The entire woodworking industry, from the logging camp to the furniture factory, is expected to develop considerably within a short time, owing to ample tariff protection; consequently an unprecedented demand for saws of all types will be created. American saws have been imported indirectly and in increasing quantities because of their excellence, for, contrary to the usual custom, purchasers of saws insist upon good quality, this being the main reason why the imports of German saws have decreased. The Peugeot works, France, supply handsaws of long-established reputation. Matheson, of Glasgow, Turner & Nailer, and Ibitson, of Sheffield, have an important share of the trade in wood and hack saws. Germany sells few handsaws in the Turkish market, its principal exports consisting of saws for German woodworking machinery already in use there. This portion of the trade is comparatively small. However, it has fair prospects, as the demand will increase with the further development of the wood industry. A low-priced handsaw is in brisk demand, but it must have a specially shaped handle to meet the requirements of native carpenters, who sharpen their saws to cut on the pulling stroke instead of the pushing or forward stroke. Many woodworkers, however, use handsaws similar to those used in America. A popular American handsaw is imported through Hamburg. One firm's half-yearly order for these saws is about as follows: No. 26, 72 saws; No. 24, 120; No. 22, 120; No. 20, 150; No. 18, 150; No. 16, 120. The aggregate yearly orders for this particular type of saw, for Constantinople alone, amount to more than ten times these numbers.

Crosscut saws with notched square teeth are in demand for cutting green wood. Turning saws with shark's-tooth blades are used by nearly every carpenter in Turkey. The frames are usually made locally. Back saws for fine work (mortising, etc.) are in increasing demand. Band saws are imported in small quantities in lengths of 50 to 100 meters (164 to 328 feet) for sizes between ¼ and 1 inch wide, and in lengths of 25 to 50 meters (82 to 164 feet) for sizes between 1 and 2½ inches wide, and are brazed locally. Gang saws are also imported in small quantities, mostly $\frac{1}{16}$-inch clearance, normal tooth, to be used by hand.

The demand for saws of all kinds will surely increase, as the systematic exploitation of the native forests has begun. The number of sawmills has been steadily increasing even during the war. The machines used are of German make and are furnished with a set of reserve saws; some people, however, prefer to use English or French saws even on the German machines, because of their superior quality.

The principal make of German woodworking machinery introduced in Turkey is that of Carol Kirchner, Leipzig, while the German supplying center for small saws is Remscheid.

Hack saws are used in increasing quantities. The construction of railroads, tramways, Decauville roads, etc., has created a steady demand. American blades enjoyed a good reputation before the war; they had a German make as competitor.

CHISELS AND GOUGES.

Edge tools unquestionably hold first place among the woodworking tools imported. Chisels were hitherto imported from France (Peugeot) and in lesser quantities from Germany, with a few from Matheson, Glasgow. No American chisels were imported. A good quality, forged from crucible steel, oil tempered, and sharpened ready for use, is in demand. The blade and socket must be made from one piece.

Firmer chisels and gouges have the largest sale. The chisels with plain back and also those with bevelled back, put up in packages or cardboard boxes, sell best. Sets put up in cloth rolls or wood boxes are not in demand.

Gouges with inside bevel are chiefly in demand, the length from shoulder to cutting edge of blade being from 6 to 8 inches. Butting and framing chisels (the latter usually with bevel back) are in comparatively limited demand, the firmer chisel being often used instead of the butting chisel.

The demand for carving tools has been decreasing rather than increasing, principally because the old-time carved furniture has been gradually discarded in favor of the modern plain, straight-line models.

AUGERS AND BITS.

The American makes of augers and bits are well known and were successfully competing with various inferior German makes before the war—the latter, however, being sold in larger quantities because of lower prices. The American brands best known in Constantinople have both been imported through Hamburg. A high-grade quality is in demand in center, shell, and expansive bits. Augers with the end of the handle formed into a ring for the insertion of a wood handle are particularly liked. They must be packed in cardboard boxes. Sets in wooden boxes or cloth rolls are not in demand. The sizes most used are from 18 to 25 millimeters (0.71 to 0.98 inch) in diameter. There is a steady demand for low-priced gimlets of assorted sizes. The estimated yearly imports of boring tools of all kinds for Constantinople alone amount to approximately $50,000.

[illegible]

[illegible] in Turkey [illegible] [illegible] were used. [illegible] [illegible] to [illegible]. [illegible] [illegible] [illegible] [illegible] There is already a [illegible] American [illegible] [illegible]

PLANES.

Cutting-board planes have been imported chiefly from England and France, together with cheaper German makes of lower grade. It is [illegible] with planes as with most other cutting tools; the [illegible] British and French makes in spite of [illegible]. No matter how poor a workman is, he knows [illegible] a good cutting edge and he is willing to pay for it.

American planes have been represented in Turkey exclusively by [illegible]. However, there seems to be no reason why American-made wooden [illegible], and fancy planes should not be imported. The [illegible] may have been the price, but this is not expected to [illegible] in favor of Germany after the war.

Drawing knives and spokeshaves might equally be imported, especially spokeshaves, as it is proposed to expand the carriage industry greatly. So far a primitive, locally made blade has been used by wheelmakers.

SCREW DRIVERS.

By far the majority of the screw drivers used in Turkey are of German origin. Before the war they were so cheap that they had to be given preference, especially in small sizes, in spite of their inferior quality. The need is felt, however, for a blade that will not bend, chip, or crumble, as well as for a better handle, that will adjust itself in the hand and insure a firm grip. A form of screw driver that has found particular favor with mechanics has the blade, bolster, shank, and head drop forged from one piece of tool steel, tempered, natural finish, with two cheeks of hardwood as a handle, the length of the blade being from 3½ to 8 inches. Another form of screw driver appreciated in Turkey has a forged crucible-steel blade extending through the handle with a square head at the end. The hardwood handle is usually beaded and is reinforced by a brass or nickel plated steel ferrule. The blade is from 2 to 6 inches long and the handle 3 to 4 inches. There is a similar type sold for mechanics' use; it is stouter, with a reinforcing steel cap on the handle, and has the upper portion of the shank hexagonal or octagonal in shape, to take a wrench. The three last-mentioned types are the better qualities, which hitherto have had small sales but which local dealers believe [illegible] the best sellers henceforth.

A German imitation of an American ratchet has made its appearance, but seemingly with less success than the original.

HAMMERS.

Practically no hammers are imported from America. The Barmen and Dusseldorf districts in Germany, together with Sheffield, England, obtained the bulk of the business before the war. In carpenters' hammers Germany was almost without competition, selling a second-grade steel hammer, with comparatively soft striking face, tempered claws with edges neither properly slit nor hardened, and a poor fastening wedge. These hammers were imported in large quantities, both with and without handles. Machinists' hammers with octagonal head, ball peen, were imported from England, as were blacksmiths' rounding and riveting hammers, on account of the excellence of the crucible steel. The American hammers have the advantage of being furnished with hickory handles, which combine great strength with extreme lightness, imparting to the tool a better striking quality. This and other advantages were not fully recognized in Turkey, presumably because before the war American prices were high compared with those of Europe in this line. A great demand is foreseen after the war for the above-mentioned hammers, as well as brick, macadam, and stone masons' hammers, building activity being expected on a large scale. Blacksmiths' sledges were imported principally from England. Upholsterers' hammers are imported almost exclusively from Germany. The magnetic type so popular in America is unknown in Turkey, but would undoubtedly sell well if introduced, as the upholstery trade is well developed and the workers are above the average.

Bill posters' hammers are not used, bills being pasted instead of nailed.

ANVILS.

Anvils are in limited demand. In former years they were imported from France and England, but lately German factories have been underselling all competitors with an anvil having a cast-iron body and a very thin steel face improperly welded on. These anvils do not wear well, as the face soon comes off and the horn becomes brittle.

VISES.

In vises, however, the demand is steadier. Leg and bench vises were principally imported from Maubeuge, France, while Germany supplied hand vises. It will be a long time before Maubeuge can supply again, and dealers do not as yet know where they will buy. Retail prices for bench vises varied between $20 and $25 each.

PINCERS, PLIERS, NIPPERS, NAIL PULLERS.

Carpenters' pincers are imported almost exclusively from Germany. The better kind is very little in demand. Claw and screwdriver handles are not liked, straight handles being preferred, with both jaws and handles in black finish. Nail pullers are practically unknown but should find a market, as there is much crating, packing, and unpacking done. Pliers and nippers were formerly imported from

France, but with the advent of German and American competition the French share has shrunk to a trifle. American pliers and nippers are much liked, particularly flat-nose and raised-side cutting pliers. Combined ball-bearing pliers and wire cutters, having the cutters in line with the rivet that joins the handles and having the inside faces of the jaws scored, have been particularly in demand since electric light was introduced in Constantinople. Pliers with insulated handles have not yet made their appearance; however, with the increasing installation work for electric light and gas, these tools will be needed, as well as gas pliers, of which the double-jaw type, with milled teeth and natural finish, is already used. Bolt clippers are in limited demand; it is, however, curious to note that only two bolt clippers are offered for sale—an original American tool and the German imitation of it.

WRENCHES AND PIPE TOOLS.

The first monkey wrenches shipped to Turkey came from England and America and were called "English keys," a name by which they have been known ever since in Turkey. Six years ago most of the wrenches sold in Turkey came from America; to-day, with the exception of pipe wrenches, the bulk is supplied by Germany. This change means quite a loss to the American trade, for, during the time in which the German competition has wedged itself in, the consumption has considerably increased. The Germans sell their own brands and also imitations. These imitations are sold to the dealer as such; the latter, however, always tries to market them as the genuine American article. The native workman, who knows neither German nor English, does not recognize the small difference in the trade-mark and confidently purchases what he believes to be the American article, only to be disappointed in the imitation. American manufacturers will readily realize how much harm results from such a condition, especially as there is no one directly intrusted with their interests who, by adequate advertisements, could guard the public against unfair competition and keep the manufacturers informed concerning competitive efforts.

The monkey wrench most commonly used in Turkey has jaws forged from tool steel, steel adjusting screw, and wooden handle. Automobile, bicycle, and alligator wrenches are in less demand. Spanner wrenches, S shaped, have large sales in all sizes; they should be packed in cardboard boxes, as cloth-roll packing is not liked. In combination and pipe wrenches American products have so far been able to withstand the German practices with more success than common wrenches. It is asserted that the solid grip afforded by American pipe wrenches, both chain and jaw type, is unique and is the best selling point they have. While most of the tools and materials used by the gas companies are of German origin, the engineers declare that they are obliged to order American wrenches and pipe cutters because of their superior design.

The business in wrenches and similar tools is expected to increase enormously because of the introduction of small motors, automobiles, motor boats, etc., that is now taking place.

The contemplated agricultural development, systematic cattle raising, and irrigation, with the resulting use of pipes for the installation of wells, windmills, pumps, water conveyance on farms, etc., will increase the demand for threading tools, which is already considerable.

Before the war screw plates were imported as follows: From Germany, 80 per cent; from England, 10 per cent; from other countries, 10 per cent.

The Remscheid factories had a strong hold on the market, solely on account of their low prices. It was not uncommon to see a mechanic use the German stock or tap wrench with English or American dies and taps. There are comparatively few separate taps and dies imported from Germany, the complete plates being sold, whereas from England and America the opposite is the case, and therefore the single pieces are used in the German plates when replacements or different sizes are required. The Whitworth standard thread is commonly used.

MEASURING TOOLS.

Micrometers, calipers, compasses, etc., have been imported for a long time from Austria and France, with the former leading in sales. In recent years two Austrian firms—Bertran & Co., Vienna, and the Mass-Industrie G. m. b. H., Reichenbach i./V., have practically monopolized the Turkish market. Whatever business there was, however, was confined to the larger cities, for in the interior the worker is still content to use his thumb nail as a guide. Tapes, steel, linen, or cotton, with fiber or metallic case, were also supplied mainly by Austria, with Germany second. Cheap folding meter rules, enameled yellow, were imported in bulk from Germany. England supplied the better grades in flexible hardwood, enameled yellow, with concealed stiff springs at the joints to hold the rule rigid when open. The graduations must be in centimeters and millimeters on one side and either inches or archins on the reverse (the Turkish measure, 1 archin = 25.555 inches). Boxwood rules with brass trimmings, mostly arch joint, have recently been successfully introduced. There is a fair demand for squares and bevels in medium qualities. Circular wire gauges, screw pitch gauges, and compasses are principally imported from Germany.

AXES AND HATCHETS.

Axes and hatchets are imported from the United States and Sweden almost exclusively. A broad ax, with a single, forged crucible-steel bit in natural finish, is mainly used in Turkey for cutting cord wood (presumably Wisconsin S. D. pattern). This is steadily replacing a home-made ax similar in form but of inferior quality. Double-bit axes are not in demand. A prominent local dealer states that he is about to take up with his Swedish suppliers the question of prompt deliveries after the war, as he expects that the announced exploitation of the vast Anatolian forests will cause an unprecedented demand.

Hatchets are sold mainly in the interior. A popular hunter's type with red anti-rust finish is imported from Sweden. The Ottoman Government is an important purchaser of hatchets, with and without sheaths, for military use. It has so far covered its needs in Germany and Austria, as a special design produced in those countries has been adopted.

Adzes are in greater demand than hatchets. No native carpenter, cabinetmaker, or housebuilder thinks he can work without one. Germany and France have hitherto been the suppliers; the German makes, however, have been losing ground, owing to the very poor quality of the steel. Adzes used in Turkey are smaller than the American and have flat heads and natural finish. In the middle of the blade an opening is provided that serves as a nail puller, so that the adze can be used as a case opener, as well as a hatchet, a hammer, a plane, or a pair of pincers, and not infrequently it replaces all these tools in a native carpenter's kit. The adzes made locally by hand are not provided with this hole and for this reason, as well as on account of lack of uniformity in the quality of the steel, they can not compete with the factory-made article.

MASONS' TOOLS.

Ten years ago France supplied most of the masons' tools, as well as the bulk of the principal building materials, used in Turkey. It has since had to contend with German competition, which has asserted itself in recent years principally in trowels; however, the French trowels (mainly from Maubeuge) are still preferred to those from German Lorraine, which are of inferior quality. The demand has been steadily increasing during the past eight years, but the high-water mark is expected to be reached during the period of reconstruction and modernization that will undoubtedly follow the war. The trowels used in America can not be sold in Turkey, because masons, bricklayers, etc., have different ways of working, which necessitate another form. The most popular brick trowel has a broad round toe, wide, heavy heel, and wooden handle. Pointing trowels have large sales, while corner trowels are seldom used. Plastering trowels, with a slightly convex blade riveted to the iron mounting and tang extending through the wooden handle, are coming into general use. Brick jointers are not in demand, pointing trowels being used instead. Plasterers' hawks are made locally out of one-piece pine boards, and, although the wood is unseasoned and consequently soon warps, they are cheaper in use than imported wooden ones with mortised strip in the middle and far more so than those made of rolled aluminum. Imported hawks are sold only occasionally, the same being true of darbies, which are also made with wooden blade, although some few workmen (mostly Italians) prefer the imported steel blade, with hardwood rib. Cement tools are not in great demand, trowels being substituted.

PICKS AND SHOVELS.

Picks are one of the most important hardware articles sold in Turkey, because the country is in course of development, with roads, railways, and streets building or to be built, entire towns to be modernized, irrigation works, canals, and harbor buildings planned or being executed, and picks are one of the first essentials for work of this kind. This need has been fully recognized by the German pick manufacturers, who a few years ago formed a syndicate for the Levant pick trade. It was exceedingly strong and quickly captured the business. As a result picks of poor quality (the kind that is wanted) were sold in Turkey at very low prices, until French and Belgian rivals withdrew; then they were sold for higher prices than ever before, quality considered. It would seem well worth while for American manufacturers to try to capture this business. The most popular pick has a weight of 4½ to 5 pounds. Coal-miners' picks are in increasing demand. A cheap grade of shovels is generally imported, with round-point blade, long socket in line with the blade, and without handles. The railroads and similar enterprises use D-handled shovels, but the quantity is comparatively small. Spades are imported from Germany for use on farms. The majority of the farmers in the Ottoman Empire are poor and consequently purchase cheap tools, but modern methods of agriculture are being introduced through the schools of agriculture now located in all sections of the country, and with education a demand will be created for tools of good design and quality. This will affect the pick, shovel, and spade business among the first.

III. CUTLERY.

MISCELLANEOUS, COMMON AND FINE.

Cutlery may be divided into common and fine grades. Seventy-five per cent of the common cutlery imported into Turkey comes from Germany and the remainder from France, Austria, and Belgium. Less than 10 years ago cheap cutlery was supplied chiefly by France and England, but gradually German manufacturers introduced very low grades, which were not produced in France and England. The difference in prices being considerable, the importers disregarded the quality of the blades and the solidity of the setting of the handle in the case of knives and the composition of the metal in the case of other pieces, and bought the German goods. The cheap German table knives can not be put in hot water to be cleaned because the filling of the metal handle melts and the blade becomes loose. The principal metal used for common cutlery handles is alpaca or white metal of inferior composition. Bone, horn, and similar materials for knife handles are not in demand.

Alpaca cutlery is sold according to brands ("Pig," "Stag," "Elephant," "Donkey," and "Anchor"). France supplies first-class alpaca cutlery and the Austrian Krupp works also supply a good quality, but the German factories excel in the production of low grades, which are supplied in a great variety of designs, and if the latter do not suit local requirements special designs are produced, even for small orders. The production of staple cutlery in Germany can not have suffered much during the war, because, among the many lines of hardware goods used for military purposes, cutlery is prominent, being required in large quantities by soldiers, for hospitals, prison camps, etc. On the other hand, the production of fine cutlery has suffered both in Germany and Austria. However, in this line France has always predominated and has maintained her place (supplying fully 80 per cent) in spite of strenuous efforts on the part of German manufacturers. The German imitators can not produce the same artistic designs and do not supply as good a blade or plating. There is an English quality that, so far as cutting edge and thickness of silver coating are concerned, is superior to the French product, but it is higher priced and, moreover, supplied in English style—that is, plain surface with straight lines—which does not find favor in Turkey. The most famous French supplier is Christofle, Paris. The silver-plated table cutlery found in Turkey is invariably made, as in America, of a white metal composition and is plated in varying thicknesses.

In all other lines, such as scissors, kitchen knives, etc., Germany has captured the market. That country also supplies 75 per cent of the hair clippers imported, and the remainder is furnished by France. The French shapes are much preferred, but the Germans manage to produce close imitations at much lower prices. In razors Solingen and Remscheid, in Germany, supply the bulk of the cheap qualities, while a limited quantity of high-grade razors is imported from Sheffield.

SAFETY RAZORS.

The safety razor has in recent years made considerable progress in Turkey. A well-known American make, in spite of the fact that it was not represented directly, has made comparatively many converts, but the lack of a representative to take care of the interests of the manufacturers has made itself felt in other directions. It appears that during the war there have been shipped to Turkey blades for these razors that were put up in the usual American packing but that actually came from German factories. They were, in every superficial respect, like the genuine blades, the only difference being the poor quality of the cutting edge. These blades have to be discarded after being used once or twice. During the war blades packed in what appear to be original packages, bearing a label representing the American flag, have been received in Turkey from Germany. The blades apparently are genuine, but, judging from results, the majority of the users conclude that they must be used blades, resharpened in Germany. The importers of the blades refuse to indicate the source of supply, which attitude tends to strengthen the above belief.

American safety razors have been imported from Hamburg and Bremen jobbers, from Paris, and from London. It is thought that, with responsible agents who would carry on the requisite advertising and education of the public, the sales of these razors might be enormously increased. A large number of imitations, such as the "Luna" and others, have flooded the market and are often sold as the genuine American article. Some persons also use the original blades with these imitation razors, and apparently with satisfaction. A French safety razor, the "Apollo," has in a short time been made popular as a result of the efforts of the commission agent who introduced it.

Less expensive American razors, such as one that retails for $1 in America, would probably sell well if properly introduced.

IMPORTANCE OF IMPORTS.

On the whole it may be said that cutlery is an important item of importation into Turkey. The orders for individual articles reach respectable figures. One of the principal merchants reports his yearly requirements of staple goods as follows: Table knives, 10,000 dozens; spoons, 60,000 dozens; forks, 40,000 dozens; scissors, 10,000 dozens; cheap razors, 5,000 dozens; hair clippers, 1,000 pieces.

More spoons then forks are imported because the Turk in the interior often uses the former only and dispenses entirely with the latter, using his fingers instead. The above figures may be multiplied by five to arrive at the total for the Constantinople district.

The Ottoman customs figures on common cutlery for the year ended March 13, 1914, are herewith given as a guide in determining the relative share of each country in these imports into Turkey, but the items themselves are considered to be far below actual figures: Germany, $62,511; Austria, $26,699; Belgium, $11,548; France, $7,582; Great Britain, $7,562; Netherlands, $3,876; United States, $720; other countries, $3,492; total, $123,994.

IV. BUILDERS' AND CABINET HARDWARE.

In no class of hardware are the needs of the country more undefined than in builders' hardware. This is possibly due to the fact that there are no building standards in Turkey, the system used depending, in the cities, on the nationality of the architect or, if the latter is a native, on the country where he studied, while in the interior primitive house construction is disappearing but slowly. Therefore builders' hardware from nearly every manufacturing country is found on the Turkish market, and in most cases the buyers oscillate from one kind to another without definitely fixing on any one standard. To suit Oriental architecture elaborate designs of appliances and trimmings are required. German manufacturers have not as yet succeeded in imitating the elegance and refinement of the expensive French models, while, on the other hand, local merchants desire to replace certain very low-grade and low-priced German articles now on the market by goods of better quality, even at increased prices. A manufacturer of builders' hardware entering this field would accordingly have this favorable basis of undetermined requirements to work on, and could more easily introduce and establish his own line. Similar conditions exist in the cabinet-hardware line, although in these goods the cheap German production asserts itself better.

LOCKS.

Locks of every description are imported, many of them being imitations of the original French and English models. It should be noted that conditions of security in Turkey are different from those in America. For example, in the United States a store is locked merely by turning the key in the front door, while in Turkey every store is protected at night by steel shutters fastened with a set of padlocks, so that what would be used as a store-door lock in New York may not be salable as such in Constantinople. Private and apartment houses also have different means of protection and, unlike American residences, are secured by heavy iron doors, so that a front-door lock in America may be more suitable as a parlor-door lock in Turkey. Similar conditions exist in all lines of locks, probably explaining why so few have hitherto come from the United States.

For iron front doors and gates a French rim lock with medium-sized keys is popular. Made of mild steel in natural finish, with a strike plate of the same material and finish, it has a sliding bolt that may be operated from the inside by means of a horizontal latch, and a dead bolt operated from both inside and outside by the key exclusively. Any lock of similar construction and medium price could be successfully introduced, especially an American make, because American lock manufacturers enjoy a reputation in Turkey for unusual ingenuity and skill.

For wooden doors, larger but lighter locks are used, similar in appearance to the rim night latch with slide and dead bolt used in America. Both forms are furnished with two bit keys for each lock.

Mortise locks with knobs are principally used for room and closet doors. They are of inferior quality, mostly of German make, with clumsy iron bit keys, two to each lock, 3 to 5 inches long and weighing from 1¼ to 2½ ounces each.

Locks in ornamental cast brass and bronze like those used in American stores and residences, particularly the popular American thumb latch, are not well known on the Turkish market. Certain American rim latches are well introduced, but the demand thus far has been only among a small circle of builders, although it is increasing.

Among the smaller types, drawer locks stand first as regards the importance of the business transacted, and Velbert in Germany has been the principal supplying center. The locks are of the bit key type, with open riveted iron box, iron bolt, double key hole, and oval bow key. An order placed by one of the local merchants three times a year amounts to about the following: 1 inch high (direction of the movement of the bolt), 100 dozens; 1¼ inches, 100 dozens; 1½ inches, 200 dozens; 1¾ inches, 250 dozens; 2 inches, 300 dozens; 2¼ inches, 200 dozens; 2½ inches, 100 dozens; 2¾ inches, 100 dozens; 3 inches, 50 dozens.

The same sizes are imported also in better qualities, with closed box, brass rivets, toothed bit key (named "Fichet," from its French inventor, but now manufactured in Germany as well), and although more expensive they are steadily gaining in favor.

The drawer locks above described are also used as cupboard locks.

Locker locks are not in demand, as lockers are found only in a few foreign—mainly American—institutions. Chest locks of poor quality are imported from Germany in heights, as above described, from 1 to 3 inches. The demand is considerable, as the use of chests has spread all over Asia Minor, where they replace cupboards, wardrobes, and safes.

Combination locks have not been imported in any quantity thus far. Recently local plants started to imitate American office furniture, and consequently desk locks have been imported in increasing quantities, especially roll-top desk locks with rigid iron bolt, self locking by means of laterally sliding teeth, hooking under the iron strike plate. These locks have two double-bitted, nickel-plated keys each and are supplied with 10 changes of key. The same lock in brass is imported in smaller quantities.

Trunk locks are imported in large numbers, as the manufacture of trunks is a well-established industry in Turkey. From the nickel-plated tin-plate lock of very poor quality formerly used, the trunk makers have now turned to a type with hinged, round pointed iron lid plate, brass plated, similar to those used on American trunks. Spring bolts (also of the type used in America, but generally made of iron) are in demand. For locally made suit cases, the old tin-plate locks, of doubtful strength, are still in use, as suit cases of poor quality are made of canvas-covered cardboard only. During the war, however, owing to shortage of importations, a few makers have turned out leather suit cases of comparatively fair quality, with first-class brass suit-case locks, which have found great favor and will probably remain in use.

Particularly in Turkey, padlocks have perhaps a more important place than other locks, because, being easy to apply, they are often substituted for store-door locks, chest locks, cupboard and drawer locks, especially in the interior. Velbert in Germany is the principal supplying district, although in recent years American makes have been successful competitors. The cheap qualities are the best sellers, because they embody the improved features of better types—as, for instance, self-locking spring shackle, flat keys, and varnish finish of the case—though, on the other hand, there are few changes of keys to each type and both material and workmanship are very poor. American padlocks are particularly in demand because they have several key changes, are stouter and nonrusting, have a wide spacing of the shackle when closed, and have keys whose size, shape, and strength are liked.

Combination padlocks, used chiefly for locking steel shutters of stores, are mainly of English make, consisting of a wide, heavy steel shackle, a set of brass rings with numbered or lettered surface turning on an axis that forms a direct connection between the two ends of the shackle. The use of these locks is limited because of the fact that they are rather expensive.

DOOR KNOBS, PULLS, AND HANDLES.

Door knobs of the pattern common in America are not generally used in Turkey, but are replaced by a model having on one side a knob, round or oval, and on the other a straight handle of enameled iron, porcelain, glass, or brass, mounted on an iron shaft bent at a right angle to the spindle. In Turkey these door handles are used instead of knobs for the inside of doors because most structures have brick inside walls, two bricks deep, making the door jamb of such thickness that it would be cumbersome to turn a knob in the deep corner that is formed, while on the other side, which is in line with the wall surface, sometimes the ordinary knob is used and at other times the handle is put on both sides of the door. These handles are also made of wood, in addition to the materials above mentioned, but in such cases plated iron or brass roses are used. In general the poorer qualities are imported, which give trouble because the soft iron spindles break easily. Door pulls and push plates are in small demand, as spring doors swinging both ways are not found in large numbers.

Escutcheons for bit keys are in large demand, especially in plated cast iron for general use and in brass or nickel-plated stamped iron with embossed design for cabinet locks. Drawer pulls, reversed pocket type, in bronzed or nickel-plated iron and steel were sold in large numbers before the war. Drawer knobs of wood or porcelain, with bolt and nut for fastening to the drawer, are also imported in large numbers. Japanned cast-iron chest handles in all sizes are in demand.

Drop drawer handles made of stamped iron, nickel or brass plated, with correspondingly plated iron or steel bail and studs, with and without bit keyholes, are in great demand, as well as ring pulls of like material and design. Plain drop drawer handles, with iron or steel bail and studs and stamped iron rosettes, plated or japanned, are imported in the larger sizes. Commode buttons, desk knobs, etc., in materials and designs similar to the articles noted above are imported in varying quantities. The heavy, ornamental stamped or cast brass models so extensively produced in America do not find ready buyers, as neither the same style nor quality of furniture is used in Turkey as in the United States.

DOOR BOLTS.

Door bolts are imported in considerable numbers, particularly flush bolts, of which the better qualities are preferred. Many new houses have their doors equipped with flush lever bolts of cast bronze, about ¾ to 1 inch wide, and 4 to 8 inches long, and others have been fitted with flush bolts having thumb push instead of lever action and made of brass, steel, or cast iron. Flush bolts with raised knobs to be adapted to the surface of the door (as contrasted with those just mentioned, which are adapted to the thickness of the door jamb) are imported in cast and wrought iron, but in lesser quantities in Constantinople than the lever bolts, while the reverse is true in the Beirut and Smyrna districts. Of all door bolts, the barrel type indisputably predominates, with wrought-iron plate, cast-iron bolt and knob, all japanned, four screw holes in the larger piece of the plate and two in the smaller. These bolts, from 5 to 8 inches long, are very extensively used in the interior instead of room door locks for the inside, while on the outside a padlock is applied when necessary. Square case bolts are seldom used and then only the heavy types with chains for front doors, while, on the other hand, chain door fasteners of wrought iron with heavy steel chain, welded links, are sold in large quantities. All articles described under this heading are imported from Germany.

HINGES AND HASPS.

Hinges are among the chief staples imported. Belgium and Germany, before the war, were the principal purveyors of strap and butt hinges. Strap hinges have an important place in the Turkish hardware store, especially in the interior of the country, where they are used for gates, outside and inside doors, cupboards, chests, tables, etc. In the interior doors are rather low and wide and consequently more difficult to swing than narrow high doors of the same weight and thickness; and therefore strap hinges, having a broader and stronger grip on both the door and the frame, are preferred to any other form. The United States has been indirectly supplying a portion of the demand through Hamburg and Bremen, and certain makes are in constant demand. T hinges are in less demand.

Attempts were made at direct importation from the United States, but in spite of very acceptable prices, the undertaking failed solely on account of poor packing; and this is the universal complaint against American suppliers. In this particular case, the barrels were too light for their contents and arrived broken; this resulted in loss, through shortage and rust, and naturally discouraged the importers. Such incidents not only affect the persons directly concerned but the news spreads with remarkable rapidity among the trade and, besides discouraging further attempts at direct dealings with the United States, occurrences of this sort are made use of by competitors to the detriment of American trade in general.

Steel butts are also an important item. One firm imports the following order twice a year indirectly from America: Fast joints—2½ inches high, 500 packages of 2 dozen each; 2¼ inches, 1,000 packages; 2 inches, 1,000 packages; 1¾ inches, 1,000 packages; 1½ inches, 1,000 packages. Same with loose pin—2¾ inches high, 100 packages of 2 dozen each: 2½ inches, 150 packages; 2¼ inches, 150 packages: 2 inches, 150 packages.

Small narrow hinges are ordered from Hamburg by the same house, as follows: 1¾ inches broad, 100 packages of 2 dozen each; 1½ inches, 200 packages: 1¼ inches, 500 packages; 1⅛ inches, 500 packages: 1 inch, 500 packages.

Local dealers believe that these figures could be enormously increased if it were possible to deal directly with America, because by the paying of toll to the German jobbers the price is seriously affected. Besides the above there are imported from America some special high-grade types, such as double-acting spring hinges, ball-bearing floor hinges, and brass butts of all kinds, in limited though growing quantities. Open-spring hinges for lavatory doors, etc., and surface butts are little in demand. Fancy box hinges are not imported, there being no industry requiring this type; for chests, steel and brass butts are used.

Plain wrought-iron hasps, strap-hinge type, are sold in considerable quantities, being principally used in the interior for locking cupboards, cases, etc.

Paumelles, or French butts (which, as the name implies, originated in France) were, before the war, imported from Germany in polished steel. Simple in construction, there are but two pieces to the hinge, each piece bearing half of the barrel. The lower half barrel, which is mortised into the door frame, has the pin fastened to it and protruding to the full height of the hinge. The upper half barrel, which is mortised into the window or door jamb, hinges on the protruding pin of the lower half. Being easy to attach, paumelles are mainly used for French windows, outside Venetian blinds, etc.

A better quality of paumelle hinges, with antifriction brass washers and two ornamental tips, is imported from France and to some extent from America. These hinges are not supplied by Germany. The demand has hitherto been small, but the improvements in the buildings that have been erected in recent years have created a demand for hinges of the better qualities, as well as for all other builders' hardware superior in workmanship and finish to that formerly imported.

DOOR CHECKS AND SPRINGS.

"Blount" pattern door checks, in the comparatively short time since they were introduced, have made considerable headway. Today many of the new buildings erected in Constantinople are provided with this appliance. American makes are sold, though the bulk of those used have been of French and, recently, of German makes. The European models, while admittedly not as good as the American products (not being reversible without a change in the inside mechanism) are much cheaper, and find ready customers, especially as the buyers are mostly contractors who must supply a "Blount" pattern check in order to comply with specifications, but who, since no particular make is named, naturally choose the cheapest.

The types principally used correspond to those made in America, for doors about 3 feet wide, weighing 16 pounds, and 4 feet wide, weighing 20 pounds. They resemble the best American types, in that they are noiseless in action, leakproof, have adjustable tension, and are operated with a nonfreezing oil compound, in which the working parts are immersed.

It is thought that certain door checks made in America, similar to the Blount pattern in appearance but worked by a heavy flat steel clock spring, might, in view of the low price, be successfully introduced in Turkey, provided the spring is strong enough.

In plain door springs, the coiled steel wire type, japanned or nickel plated, with star rosette, ends screwing on, and adjustable tension, is mainly in demand. These springs have in the past been furnished by Germany, but just prior to the war small arrivals of American models from Hamburg proved most satisfactory. Thinner wire coils, with wire loop eye or overhook ends, without adjustable tension, are chiefly used for gates. In the interior these wire coils are used for house doors, where they are slowly replacing the antique door-closing device. This latter consists of a cord fastened to the middle of the top of the door frame, passing through a hole in the center of the top stile of the door and hanging down about three-fourths of the length of the door. A stone, the weight of which varies with the weight of the door, is fastened to the end of the cord and by gravity forces the door to swing shut. In some cases the door frame is fitted with a cotton or felt listing to act as a cushion and absorb the shock of the banging door. This primitive device is still found in all Turkish baths and mosques, and in private houses in most interior districts.

DOORBELLS.

Doorbells are found on all new houses and apartments in Constantinople, but the use of door knockers has not considerably decreased in the interior, where heavy, plain iron or brass knockers are commonly used. The majority of these are made locally by hand and, while unique in design, do not have the finished appearance of the factory-made article and undoubtedly will give way to the doorbell in time. The bell principally imported is operated by hand and has a nickel-plated iron gong, semicircular rotary turn, and plate. The latter bears in embossed lettering the French words: "Tournez s. v. p.," that is, "Please turn." These are bought from Germany; others are imported from the United States via Hamburg, and bear the words "Turn to the right"; while satisfactory as regards both quality and price, they are not as well received because the English inscription is not intelligible to the majority of the people, who, however, understand and commonly use French. Bells with push buttons, or in brass or old copper finish, and alarm gongs such as are used on store doors, etc., have practically no sale.

Before the war one local dealer regularly ordered twice a year from America, via Hamburg, 600 of the hand-operated bells described above, which, however, represented only a very small part of the total imported: and America's share could be materially increased by the simple expedient of substituting the French "Tournez s. v. p." for the English "Turn to the right." These bells are well adapted to the native requirements, especially for the better houses, where an iron knocker is not ornamental enough and a brass knocker can not be used because the brass parts are likely to be stolen at night.

The true Oriental house invariably has more servants than necessary, and it is customary to have one or more sitting in the wide entrance hall, so that a knock at the door or a turn of the bell is immediately heard. Electric bells can therefore be dispensed with, and for this reason and because of the difficulty of keeping them in working order only a few are imported; these come from Germany, with wooden base, composition or bone push button, nickel-plated steel gong, and varnished wooden coil box. Leclanché batteries prepared locally are used, so dry cells are not imported for this purpose.

ESPAGNOLETTE BOLTS—TRANSOM CATCHES.

Formerly in Constantinople, and still in the interior, windows were of the so-called "guillotine" type. This window is the same in appearance as the window commonly used in America, but with the important difference and disadvantage that it has no counterpoise. Only the lower sash of the window is free to move; the upper sash is built in; consequently ventilation is possible only by raising the lower sash, which requires considerable effort. This system is so inconvenient that in the larger towns these windows are being rapidly replaced by French casement windows, which are fastened or locked by espagnolette bolts. As recently as six years ago the only espagnolette bolts imported were of very poor quality, made of cast-iron half-round bars in natural finish with an oval knob in the center, which when turned to the right simultaneously moved the upper rod upward and the lower rod downward into sockets screwed to the window frame, thus locking the window.

The whole mechanism had to be painted with the window and usually the oil paint soon peeled off, leaving the unsightly rusty iron exposed, and the paint also stuck between the rods and the wood and hampered the movement of the bolt. Furthermore, if the wood is not well seasoned, or the sashes are poorly made, the sash soon warps and then the casement does not fit snugly in its frame and the ends of the rods do not engage their respective sockets when one attempts to lock the window, and if pressure is applied the interior mechanism, made of cast iron, breaks. These difficulties with the cast-iron espagnolette bolts led to a few trials with cord sash windows, but they do not seem to have become popular, and improvements have since been made in espagnolette construction. A type with hook at top and bottom of the rods moved by turning a handle in the form of a lever has been introduced for French windows, while for the regular inside casement window an American espagnolette bolt is rapidly coming into favor. It is distinguished from others by having either a nickel or old copper finish, solid square rods, a lever handle instead of a knob, and the mechanism is compact and strong. Hammacher, Delius & Co., of Hamburg, were supplying this article in increasing quantities before the war.

Turnbuckles or window catches are very little used, while catches for the transoms that are usually built above French windows are in great demand, in cast iron, natural finish or plated, with ring pull. An improved transom catch of American make, which automatically releases the strike with one pull and catches it with the second, has found great favor in spite of its high price. It is predicted that both in espagnolette bolts and transom catches America's sales can be enormously increased after the war if the goods are properly introduced on the Turkish market.

FAUCETS.

The imports of metal faucets have considerably decreased, since a few shops in Constantinople were, some eight years ago, equipped with lathes and started to produce brass faucets. As is the case with nearly all imported articles imitated locally, the workmanship is poor; the faucets are clumsy, lack the proper finish, and often leak, poor leather washers being used. However, because of their much lower price as compared with imported faucets, they are extensively sold, especially in the interior, where a still coarser type is made entirely by hand.

With the building of a better class of apartments and private houses the imports have somewhat revived of late years, English and French makes having a preponderant part, as the imports are confined to good qualities. Lead water pipes being always used in the houses, the local plumber needs a faucet with a plain shank to be soldered on. Faucets with threaded shanks are used only for baths, etc. Both kinds are usually finished in polished brass, but nickel-plated faucets have recently come into use also. Ninety-five per cent of all faucets used in Constantinople are of the compression bibbs form. The key is almost invariably T shaped. Faucets with a loose T-shaped key, detachable in the middle of the stem, are used to some extent but those with spring push buttons or other spring keys are not used, although they should eventually have great sales in Turkey in view of the numerous public fountains, which in some places, as mosques for example, are found in long rows. The present water waste could thus be checked. An American specialty in this line, which might meet with great success in Turkey, if properly introduced, is the drinking fountain, because it should be easy to convince the officials in charge of the public water fountains of the numerous advantages of the American model, from the sanitary and economical point of view, especially in a country that is frequently infested with epidemic diseases spread through drinking water. It is indeed surprising that such devices should not already have made their appearance in the trade.

In bath faucets Germany predominates, and in all other bath fixtures as well. The most popular type is a double faucet for hot and cold water with inscriptions of "Chaud" (Hot) and "Froid" (Cold), respectively, on small porcelain plates affixed to the circular keys. Faucets with one common nozzle are less in demand, because the valve mixing hot and cold water was defective in the types hitherto imported. All such faucets are nickel plated. Faucets with threaded nozzles, bibb or straight, are used only with filters, the nozzle being rather small for other purposes. Faucets with large threaded nozzles to fit a hose coupling, such as are found in nearly every kitchen in America, are seldom seen in Turkey, fire prevention not having reached this stage of systematization as yet, but a few are sold for garden-watering attachments.

The fire and watering nozzles found on the Turkish market are usually made locally of brass; their use is limited, however, most gardens being watered by means of watering sprinklers. This alone points to the possibility of considerable future imports in this line.

Water gates and other large water-dispensing contrivances for use in Constantinople are imported from France exclusively, the water company being French.

SHELF BRACKETS, CORNER IRONS, COAT HOOKS, ETC.

Shelf brackets are a very important article in the Turkish hardware line, as they are used for a multitude of purposes, many of which are elsewhere served by a piece of furniture or some other contrivance. They are imported from Germany, Belgium, and via Hamburg from America. The following order, given to Hamburg by one local firm three times a year, will convey an idea of the quantities imported, as it represents less than 3 per cent of the total for Constantinople: Size 3 by 4 inches, 50 dozen pairs; 4 by 5 inches, 50 dozen pairs; 5 by 7 inches, 50 dozen pairs; 6 by 8 inches, 50 dozen pairs; 8 by 10 inches, 30 dozen pairs; 10 by 12 inches, 20 dozen pairs; 12 by 14 inches, 10 dozen pairs. These are exclusively japanned corrugated brackets; other finish and types (for instance, folding wrought-steel brackets) are not in demand.

Sink brackets are imported in very small numbers, sinks being usually made of marble supported by a brick structure. Store-shelf brackets, of the ornamental cast-iron type used in America, are not imported, wooden supports being commonly substituted. Corner irons are imported in large numbers, especially those having the right angle formed by the thickness of the iron and the screw holes countersunk; while other types having the right angle formed by the width of the iron are also in demand—countersunk on the inside and more frequently on the outside, made of wrought iron, edges not ground, and used on almost every locally made window sash, besides many other kinds of wood and cabinet work.

Coat and hat hooks are imported almost exclusively in nickel-plated cast iron with two countersunk screw holes. The imports are relatively large, and with the opening of additional public places of entertainment the number used should be augmented.

CASTERS.

Casters are imported almost exclusively from Germany, in poor qualities that do not at all answer the various purposes, yet at prices so low that they manage to exclude competing articles from the market. The common type has a cast-iron frame, stem, and socket, a steel axle with visible parts japanned or bronze finished, and porcelain (or more frequently iron) wheels. These casters often sag and break, always scratch and mar the floor, and frequently do not run at all. They are mainly used for locally made iron bedsteads. Plate casters of similar material and construction, but with porcelain wheels, are used for furniture in large quantities, but are not even good enough for the poor quality of furniture made in Turkey. Lignum-vitæ or maple wheels are seen only on imported furniture, and ball-bearing casters are found only on American furniture, Noiseless, felt-lined, antifriction casters that protect the floor are unknown, which is surprising in view of the fact that most of the floors in Turkey are covered with linoleum and soon show the disastrous effect of poor casters. Double-wheel casters are not used. In general it may be said that much better casters than those hitherto imported could be sold on the Turkish market without difficulty. In recent years Germany has begun to send to that market imitations of the various American improved casters at less than half the price of the genuine articles. The outbreak of the war found the introduction of these imitations making fair progress.

V. SHELF HARDWARE.

NAILS AND TACKS.

Nails are among the articles which, at least immediately after the war, will have to be imported to a considerable extent from other sources than hitherto, the greater part of the supply having come previously from Belgium, France, and Italy, the first-named predominating. Most of the French districts producing this line have been spared (the factories are located in the Loire district, in Champagne, the Franche-Comté, the Oise and Ardennes districts), but the Belgian nail factories have probably suffered considerably, and importers are now studying the problem of future supplies. The bulk of the business is in wire nails. Because of the large number of wooden houses constructed in the interior and the use of primitive wooden contrivances for all kinds of service, Turkey requires a comparatively large quantity of nails. In the period to follow the present war, with its heightened requirements, the demand undoubtedly will be great, and even the increasing tendency to erect stone or concrete buildings is not likely to diminish the imports. The question therefore arises as to whether the American factories will be able to capture this business, and, in view of the fact that the annual imports of nails exceed 8, 000 tons, the matter seems well worth consideration.

In order to appreciate fully the future prospects, it seems appropriate to review the situation as it existed before the war, when the Belgian factories controlled the market. They had the advantage over the French manufacturers of being able to carry their goods by inland waterways the short distance to Antwerp, while the French factories, being located at inland points, without accessible waterways, were at the disadvantage that such things as nails incurred high railroad freight charges before reaching the steamer at Marseille. Moreover, the French never made any serious efforts to retain the business, while on the other hand the Germans met the situation by perfecting the arrangement for transportation, at uniform rates, of goods shipped from any point in the Empire via the Deutsche Levante Line from Hamburg. Twenty years ago the French reached the climax of their predominance in this line. The position of the

French manufacturers was undermined first by the competition of the Belgian factories and later by the appearance of American nails on the market. The Bulletin of the French Chamber of Commerce of September, 1901, contained an article on this subject of which the following is an abstract:

> About two years ago United States manufacturers began to offer their wire nails on this market. With their customary impetuosity they overcame all obstacles and for about a year and a half they nearly cornered the market. Their prices were so low that their competitors could not hold the ground, and the customers had to accept terms they very much dislike, namely, cash against documents at the bank. However, during the last six or seven months Belgium and Germany have considerably lowered their prices and now show a difference of only 50 or 75 centimes per 100 kilos as compared with the American prices. The buyer usually prefers to pay this difference and deal on more lenient terms. Therefore American imports have dwindled to an insignificant share.

Although nearly 16 years old, this statement still holds good, and in view of the many probabilities of American manufacturers reentering the Turkish market with the same "impetuosity" after the war, it seems desirable that they be reminded of this previous experience in order to avert a similar dénouement. France did not recover much of the trade that it had lost, but Belgium and Germany up to the outbreak of the war still dominated the market to such an extent that American nails were not a staple any more, but a specialty. However, two other competitors appeared in the meantime—Hungary and Italy—but neither of these countries managed to obtain the bulk of the business, though they were staunchly holding their ground. We thus find six important manufacturing countries in keen competition for this business for more than 20 years, or since the French preponderance was abolished. The result has been not only lower prices, but a lowering of the quality that, at times, made the buyers revert to the excellent French products. In view of the very keen competition certain merchants have resorted to the subterfuge of ordering underweight kegs so as to gain the difference in weight as their profit, since the nails are sold per package, case, or keg, and not by weight. Thus the original 50-kilos keg was made to contain 49 kilos net, then 48, and so on until to-day a stop has been made between 25 and 30 kilos. This practice having become general, the original object of cheating the consumer has of course been missed, and on the contrary the goods incur higher packing, shipping, and warehouse expenses. The current weights before the war were 25, 28, 29, and 30 kilos, according to the buyer's wish.

The buyer's brand or trade-mark is put on the case or keg, along with the size of the nails. The case is almost exclusively used instead of the keg for packing wire nails, as it is easier to handle. When American nails were currently sold in Turkey, they were packed in bags of 25 kilos, then a case of 30 to 32 kilos was adopted, but for the last 10 years the above-mentioned weights have been used for both cases and kegs—the weight shown being exclusive of containers. During the war Germany has resumed shipments in bags, but in very limited quantities. Wire nails having originally been imported from France, the French scale was adopted and has been maintained ever since, especially as the commercial language, even with Germany, is chiefly French. The size of the nails is written on each keg or case, the gauge number being shown on the left of a cross and the length on the right. For common wire nails the smallest gauge usually imported is N–15. Prices are the same for all lengths of the same gauge, but the larger the gauge the lower the price. An agent representing a nail factory must be fully acquainted with the market's requirements and know the proportion of large and small gauges required, because certain merchants have been known to order considerable quantities of large gauges at the current low prices and then send in a large single order for small-gauge nails to adjust their stock, insisting on a price reduction in view of the size of the order. To prevent this trick certain factories have instructed their agents not to accept orders without previously referring specifications to them.

Prices are quoted c. i. f. Constantinople with from 3 to 5 per cent for cash or 3 to 6 months' credit. The following table has been prepared from information obtained on the market regarding the imports of flat-head wire nails into Constantinople. Sizes having the largest consumption appear in italics:

Size (French scale).[a]	Price per 100 kilos (220 pounds), c. i. f. Constantinople.	Principal uses.	Size (French scale).[a]	Price per 100 kilos (220 pounds), c. i. f. Constantinople.	Principal uses.
15x15	$5.544		19x40	$4.752	Stairs.
15x18	5.544		19x45	4.752	Do.
15x21	5.544		20x33	4.554	Flooring; stairs.
16x15	5.346	Ceiling.	20x36	4.554	Do.
16x18	5.346	Do.	*20x40*	4.554	Do.
16x21	5.346	Do.	*20x45*	4.554	Do.
16x24	5.346	Covering outside brick walls; stairs.	20x46	4.554	Do.
			20x51	4.554	Do.
			21x40	4.356	Stairs.
16x27	5.346	Do.	21x45	4.356	Do.
17x21	5.148	Do.	21x48	4.356	Do.
17x24	5.148	Do..	21x51	4.356	Do.
17x27	5.148	Do.	21x55	4.356	Do.
17x30	5.148	Do.	21x60	4.356	Do.
18x24	4.950	Flooring; stairs.	22x45	4.158	Other uses.
18x27	4.950	Do.	22x51	4.158	Do.
18x30	4.950	Do.	22x55	1,158	Do.
18x33	4.950	Do.	22x60	4.158	Do.
18x36	4.950	Do.	22x65	4.158	Do.
18x40	4.950	Do.	22x70	4.158	Do.
19x30	4.752	Stairs.	22x75	4.158	Do.
19x33	4.752	Do.	22x80[b]	4.158	Do.
19x36	4.752	Do.			

[a] First figure represents gauge, second figure length.
[b] All sizes below 22 gauge at $4.158.

Before the war these wire nails were imported principally from Belgium and Germany. The German manufacturers have adopted the millimeter sizes and are billing accordingly; thus the 15x15 size of the French scale corresponds to 20x35 of the German scale (2-millimeter gauge by 3.5-centimeter length). The local merchant is obliged to convert these indications, called new numbers, into French sizes and mark them on each case, as the consumers still cling to the old denominations.

Wire nails are bought on contracts of 5,000 to 10,000 cases of an average of 28 kilos. Germany has recently attempted to introduce square wire nails, but without success. The number of nails to a given weight is not known by the local dealers. Cement-coated wire nails which have an increased adhesive resistance, as compared with the smooth common wire nails, and also resist the effects of moisture better than the latter, are not in demand, and in fact are unknown, as are barbed-wire nails. To-day, as a result of the war, the price up to 30 millimeters in length is 61½ cents per kilo, duty paid.

Fine wire nails are imported from Belgium, France, Italy, Hungary, and the United States, the Italian product being of very poor quality. They usually come packed in bags or packages of 3 kilos. The sizes mainly used are: 6x10–12–14–16–18–20, 7x24, 10x10, 11x12–14–16–18–20, 12x25, 12x28, 12x30, 12x35, 12x40.

Wire brads are also packed in bags or packages of 3 kilos each and imported chiefly from Belgium, France, the United States, and Italy. The current sizes are: 6 x 10, 6 x 12, 7 x 14, 7 x 16, 7 x 18, 7 x 25, 8 x 24, 8 x 27, 9 x 16, 9 x 18, 10 x 20, 10 x 22, 11 x 24, 11 x 26, 11 x 28, 11 x 30, 12 x 32, 12 x 36, 12 x 40.

The very fine sizes are used by glaziers to fasten glass panes in window sash, usually 10 x 20, instead of the triangular zinc glaziers' points used in America. Brads are also imported in packages of approximately 2½, 3, and 5 kilos from a New York company, but in small quantities.

Blue forged soft iron or steel tacks with large heads and sharp points are imported from Belgium, France, and Germany. They come packed in packages or bags of 5 kilos. The current sizes are: 8 x 14, 10 x 16, 12 x 18, 12 x 20. Prices varied before the war from 48 to 55 francs per 100 kilos ($4.21 to $4.83 per 100 pounds). These tacks are mainly used by upholsterers. An inferior article is also imported from Germany in the shape of blued wire tacks. Shoe tacks and corrugated shoe nails are chiefly imported from Italy and Great Britain.

Forged nails used for structural framework, landing stages for steamers, etc., are imported in considerable quantities from Belgium, England, and Germany, the United States also having a small share. The gauge and length are indicated in millimeters; 60 to 200 millimeter lengths are used, but the most common sizes are 80, 90, 100, and 110 millimeters. The packing consists of plate-iron barrels for Belgian and English imports and wooden barrels for German and American imports—the contents being always 48 kilos, exclusive of container. The price before the war was about $2.10 per barrel of 48 kilos, irrespective of the size of the nail. The German and American articles, which come packed in wooden kegs, are of poorer quality and little in demand, the former on account of the quality of the steel and the latter on account of the shape. European forged nails are wide at the head and taper toward the point, but the American nail is uniformly thick and sharpens only at the end like a pencil. It is claimed that the American-shape nails, when driven in, loosen soon, whereas the European type tightens like a wedge the more it is driven in. In view of the fact that American forged nails are imported only in trifling quantities, in spite of lower prices, it would appear that this claim might be justified.

Galvanized forged nails are also imported, chiefly from Great Britain and Belgium. They are used in building lighters, rafts, and other craft. The packing, sizes, and countries of origin are the same as in the case of plain forged nails. The price before the war was $2.86 per keg of 48 kilos net, regardless of the size of the nail. The remarks made regarding the shape of American forged nails also apply to the galvanized ones. Duty-paid prices now are as high as $0.17 per pound for plain and $0.21 per pound net for galvanized. Native smiths have for a long time been making a poor quality of clumsy nails by hand, but this industry has been steadily disappearing. On the other hand, however, the native production of horseshoe nails has continued unabated. These are made out of Swedish iron imported in the form of small rods. A quantity estimated at one-sixth of the total demand is still being covered by imports from Germany, France, and Hungary—chiefly used in the city of Constantinople, where a better quality is needed. Whether these imports will be continued is doubtful, as the new tariff applies on horseshoe nails a rate double that for other nails, apparently to protect this existing industry.

Roofing nails are not imported. The various types of roofing sheets used in America are not utilized in Turkey, the great majority of roofs being covered with brick tiles. Copper and brass nails for marine and other purposes are supplied by England and Germany.

The new Ottoman tariff provides the following rates on nails: Iron or steel—plain, $0.90 per 100 pounds; with heads of other metal, $4.80; for shoeing animals, $1.80; copper and brass nails, $10.80. As may be seen, the rate for plain iron and steel nails amounts to 40 to 45 per cent, based on ante bellum prices, and if maintained may create a native industry, in which case the iron and steel for manufacturing would have to be imported.

SCREWS.

The importation of screws, bolts, and nuts is also destined to go through important changes, for the principal purveyor before the war was Belgium, with Germany, France, and Austria following. The Belgian article is packed in paper packages containing 1 gross each, while the Austrian, German, and French manufacturers pack the same number in cardboard boxes. In both cases the size is shown on the package or box.

The principal Belgian concern operating in Turkey was La Visserie Belge, Société Anonyme, Brussels, while Austrian screws were furnished by Brevelier & Co. and A. Urban Söhne, Vienna. The French factories were Viellard, Migeon & Cie., Grandvillars, and Japy Frères & Cie., Beaucourt.

Most of these manufacturers maintained elaborate selling organizations. The French concerns sold their product through the Comptoir des Quincailleries Réunies de l'Est, Fesches-le-Châteu (Doubs), which is practically a central selling office for the syndicated manufacturers. The Germans sold through their Verkaufstelle Deutscher Holzschraubenfabrikanten, Cologne on the Rhine. In this way a uniform price was quoted by all manufacturers of the same country, but the syndicates themselves apparently did not work under any agreement, because competition was keen.

The bulk of the imports consisted of bright iron screws with flat heads. Roundhead screws had small sales, as is seen from the table shown on page 38 of this report. The so-called "goutte de suif" head (tallow-drop head), which in cross section looks somewhat like an oval, is not in demand. Roundhead screws are manufactured in the same diameters as the flat heads, but are usually billed as one number above actual diameter. Screws with square and hexagonal heads had very small sales, although the increased manufacturing of "knockdown" furniture enhanced the demand in recent years. Before the war the French denominations of diameter were used, and the Germans and Austrians who used millimeter sizes had to convert these to French numbers—a reminiscence of the somewhat distant time when France predominated in this line. The French and Belgian numbers are as follows:

FRENCH NUMBERS.

Size.	Diameter.	Size.	Diameter.	Size.	Diameter.	Size.	Diameter.	Size.	Diameter.
	mm.		*mm.*		*mm.*		*mm.*		*mm.*
10......	1.45	17......	2.7	24......	6.6	31......	11.0	38......	17.5
11......	1.6	18......	3.0	25......	7.3	32......	11.5	39......	18.5
12......	1.75	19......	3.5	26......	8.0	33......	12.5	40......	19.5
13......	1.9	20......	4.0	27......	8.7	34......	13.5	41......	20.5
14......	2.05	21......	4.6	28......	9.4	35......	14.5	42......	21.5
15......	2.2	22......	5.2	29......	10.0	36......	15.5	43......	22.5
16......	2.4	23......	5.9	30......	10.5	37......	16.5	44......	23.5

BELGIAN NUMBERS.

10......	1.5	18......	3.0	25......	7.3	32......	12.0	39......	19.0
11......	1.6	19......	3.5	26......	8.0	33......	13.0	40......	20.0
12......	1.7	20......	4.0	27......	8.7	34......	14.0	41......	21.0
13......	1.8	21......	4.6	28......	9.4	35......	15.0	42......	22.0
14......	2.0	22......	5.2	29......	10.0	36......	16.0	43......	23.0
15......	2.2	23......	5.9	30......	10.5	37......	17.0	44......	24.0
16......	2.4	24......	6.6	31......	11.0	38......	18.0	45......	25.0
17......	2.7								

All makers use millimeter lengths calculated from surface of head to point. The following list is intended to show the approximate proportion of the various sizes imported, as well as the amount of the total business. It represents a single order passed by one dealer three times a year. The aggregate yearly imports for Constantinople alone are estimated at 15 times this order. Numbers shown are according to the French system given above.

FLAT HEADS.

Size.	Gross.	Size.	Gross.	Size.	Gross.	Size.	Gross.	Size.	Gross.
10/10....	250	17/25....	500	20/20....	5,000	23/45....	300	25/65....	100
10/13....	250	17/30....	300	20/22....	5,000	23/50....	300	25/70....	100
10/15....	250	18/10....	250	20/25....	10,000	23/55....	100	25/80....	50
12/10....	250	18/13....	300	20/27....	10,000	23/60....	200	25/90....	50
12/13....	250	18/15....	500	20/30....	8,000	23/70....	100	25/100...	50
12/15....	250	18/17....	1,000	20/35....	3,000	23/80....	100	26/40....	150
14/10....	250	18/20....	3,000	20/40....	500	24/25....	250	26/50....	150
14/13....	300	18/22....	3,000	21/20....	500	24/30....	300	26/55....	100
14/15....	300	18/25....	2,000	21/22....	500	24/35....	300	26/60....	100
15/10....	350	18/27....	1,000	21/25....	600	24/40....	300	26/70....	100
15/13....	350	18/30....	500	21/27....	800	24/45....	300	26/80....	50
15/15....	1,000	18/35....	500	21/30....	800	24/50....	300	26/90....	50
15/18....	200	19/13....	250	21/35....	500	24/55....	200	26/100...	50
16/10....	250	19/15....	500	21/40....	300	24/60....	200	27/50....	50
16/13....	350	19/17....	1,000	21/45....	300	24/65....	200	27/60.. .	50
16/15....	500	19/20....	3,000	22/35....	300	24/70....	100	27/70....	50
16/17....	1,000	19/22....	3,000	22/40....	300	24/80....	100	27/80....	50
16/20....	200	19/25....	4,000	22/45....	300	24/90....	100	27/90....	50
17/10....	250	19/27....	3,000	22/50....	300	25/30....	200	27/100...	50
17/13....	500	19/30....	2,000	22/55....	100	25/35....	200	28/50....	50
17/15....	500	19/35....	1,000	22/60....	150	25/40....	200	28/60....	50
17/17....	2,000	19/37....	1,000	23/25....	200	25/45....	200	28/70....	50
17/18....	1,000	19/40....	500	23/30....	300	25/50....	200	28/80....	50
17/20....	2,000	20/15....	500	23/35....	300	25/55....	100	28/90....	50
17/22....	1,000	20/17....	600	23/40....	300	25/60....	100	28/100...	50

ROUND HEADS.

Size.	Gross.	Size.	Gross.	Size.	Gross.	Size.	Gross.	Size.	Gross.
18/10....	125	18/25....	1,000	19/17....	500	19/35....	500	20/25....	5,000
18/13....	150	18/27....	500	19/20....	1,500	19/40....	250	20/27....	5,000
18/15....	250	18/30....	250	19/22....	1,500	20/15....	250	20/30....	4,000
18/17....	500	18/35....	250	19/25....	2,000	20/17....	300	20/35 ...	500
18/20....	1,500	19/13....	125	19/27....	1,500	20/20....	2,500	20/40....	250
18/22....	1,500	19/15....	250	19/30....	1,000	20/22....	2,500		

Prices are quoted c. i. f. Constantinople on manufacturers' list prices less discounts of between 40 and 60 per cent.

Wire screw hooks, round and square, and wire screw eyes, etc., were imported from the same makers in large quantities. Brass and copper screws were imported from England, mainly for marine purposes, but in limited quantities. Machine screws with Whitworth thread were imported in comparatively small quantities.

BOLTS AND NUTS.

Bolts were formerly imported from France, but for a long time before 1914 the market was swamped with Belgian and Austrian products, while the Germans made efforts to secure the same position they had attained in the supply of rivets, where they practically drove out English and French makers, as described on page 9 of the present report. It is generally thought that the possibilities for successful American imports are no less promising for bolts and rivets than they are for nails and screws. Prices are quoted on small bolts by the hundred on the basis of manufacturers' list less 50 to 60 per cent discount, c. i. f. Constantinople, packing free. Measurements are all in millimeters, the length being calculated by the French manufacturers from the top of the head, and by the Belgians and Germans from under the head, to the point. The bulk of the imports consists of common black bolts with round heads, a portion of the stem immediately under the head being square, with only half of the remaining part of the stem threaded. Square nuts with unfinished edges are used. These bolts are called the "Ardennes" style, and are used in Turkey for a variety of purposes.

In bolts and nuts Belgium was selling about 60 per cent of the total, while the other 40 per cent was divided among Germany, Austria, France, and America. Belgium undersold all competitors. Only Whitworth thread is used. The following table shows the relation of size to consumption before the war:

	Length in millimeters.	Diameter in millimeters.
Greatest consumption	25–150	10–19
Fair consumption	25–100	9–12
	65–500	22–34
Small consumption	20–60	5–8
	125–500	28–38

The scale of sizes runs as follows: For diameters of from 5 to 10 millimeters the lengths obtainable are 25, 30, 35, 40, 45, 50, 65, 75, 90, and 100 millimeters. Sizes longer than 100 millimeters, which are usually above 10 millimeters in diameter, increase in length between each size.

Belgian prices before the war were quoted as follows, c. i. f. Constantinople, packing free, three to six months' credit or 3 to 5 per cent discount for cash:

Diameter.	Length.	Price per 100 pounds.	Diameter.	Length.	Price per 100 pounds.
Millimeters.	*Millimeters.*		*Millimeters.*	*Millimeters.*	
9	Up to 150	$4.82	19-24	Up to 150	$2.19
10	do.	4.47	25	do.	2.10
11	do.	4.04	25	Above 150	1.94
12	do.	3.68	28	do.	2.07
13	do.	2.89	32	do.	2.07
14	do.	2.72	38	do.	2.07
16	do.	2.37			

Nos. 5, 6, 7, and 8 are packed 100 in a package; 9, 10, 11, and 12, 50 in a package, and larger sizes 25 in a package.

Machine bolts, black with square or hexagonal head and nut, finished edges, are imported in large quantities. A few shipments of carriage bolts were made from New York prior to the outbreak of the war, and the bolts found favor in Turkey. It is hoped that this importation will be resumed on a larger scale when normal conditions return.

While washers are usually sold per pound in America, in Turkey they are imported mainly from Germany and Belgium and sold per thousand—mostly wrought iron, unbeveled. Sizes vary between 6 and 50 millimeters, diameter of hole, sizes 10 to 19 having the largest consumption. They are tied with wire in bundles of 100. The price before the war was about $6.35 per 100 kilos (220 pounds) c. i. f., three to six months' credit or 3 to 5 per cent discount for cash.

Cotter pins were imported with arms of equal and unequal length, the latter being measured on the longer arm. They were sold per package of 100.

RIVETS.

Rivets were imported in increasing quantities before the outbreak of the war, owing to the large number of steel-frame buildings erected. The fact that this method of building is being rapidly adopted, together with the increased activity in shipyards, etc., justifies the expectation of considerable imports after the war. Hitherto England, Germany, and Belgium shared the business. Mainly soft steel (Siemens-Martin) rivets with conical or round heads were imported. The diameter is expressed in inches, while for the length millimeter indications are used.

Diameters $\frac{1}{4}$, $\frac{5}{16}$, and $\frac{3}{8}$ inch in lengths of 20, 22, 25, 30, 32, 38, 45, and 50 millimeters, as well as diameters $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, and 1 inch in lengths of 25, 32, 38, 45, 50, 55, 65, 75, 90, and 100 millimeters, are imported, the most common diameters being $\frac{1}{2}$, $\frac{5}{8}$, and $\frac{3}{4}$ inch. Prices per English ton were approximately as follows before the war: Size $\frac{3}{4}$, $49; size $\frac{5}{8}$, $50.21; size $\frac{1}{2}$, $59.89; size $\frac{3}{8}$, $61.83; size $\frac{5}{16}$, $62.92; size $\frac{1}{4}$, $64.37.

The Belgians use millimeters to indicate the diameter also. These rivets came packed in double bags of 50 kilos net or in packages of 50 pieces or 650 grams, according to sizes. One of the principal Belgian rivet makers is the Société Anonyme des Usines, Boulonneries et Fonderies de La Louvière.

STATISTICS OF IMPORTS.

The Ottoman customs statistics show nails, screws, bolts, nuts, and rivets under the same heading. The returns published for the fiscal year ended March 13, 1914, as given below, are not thought to correspond to the actual figures, which are considerably higher, but they nevertheless convey an idea of the magnitude of these imports.

Countries.	Pounds.	Value.	Countries.	Pounds.	Value.
Belgium	12,694,035	$326,171	United States	491,104	$12,554
Austria-Hungary	9,461,441	228,915	India	161,220	7,638
Germany	6,357,278	209,171	Egypt	25,480	1,762
France	1,282,761	61,994	Russia	28,037	1,648
Great Britain	1,293,732	55,987	Switzerland	20,572	911
Italy	1,531,154	36,753	Other countries	87,688	3,796
Sweden	491,935	26,714			
Netherlands	558,386	18,743	Total	34,484,823	992,759

VI. ENAMELED WARE.

As will be seen from the statistics shown on page 42, enameled ware has an important place in the list of Turkish hardware. Since the time enameled goods were first imported into Turkey they have rapidly replaced copper, tin-plate, iron, zinc, and crockery utensils, especially among the poorer class of the population. The cheaper qualities have been those principally imported.

Almost every manufacturing country except the United States has had a serious trial for this business on the Turkish market. Before the war one could find enameled ware on that market from England, France, Germany, Austria, Belgium, Italy, and Sweden, but the staple article was the Austrian and, to a certain extent, the German. Those countries supplied the bulk of the cheap articles, which, as a rule, are colored on the outside plain dark blue or are white marbled on blue, sky-blue, pink, green, or yellow ground, and are white on the inside. A small amount is imported in plain white outside coating with or without floral design. Neither the enamel nor the iron are of good quality, and after a short time the coating flakes off, the metal becomes pitted, and holes appear.

The better qualities, which are chiefly represented by kitchen utensils, are light gray on the inside and copper brown (French) or brick red shading into orange (German) on the outside. These goods are produced by factories that specialize in high-grade ware. The French article is far superior to all others of the same price. The good German qualities corresponding to the French are considerably more expensive and not as heavy.

France once held first place in the cheap lines also, but it has long since been supplanted by Austria, which sells about 25 per cent more cheaply, besides offering other .advantages that will be referred to later. The principal French concern supplying enameled ware in Turkey is the Comptoir des Quincailleries de l'Est, Fesches-le-Châteu (Doubs). The French article is similar in quality to the English product; the latter, however, is confined to dark blue or black outside color, which does not appeal to the native taste, and therefore the English imports are insignificant.

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LETTER OF SUBMITTAL.

DEPARTMENT OF COMMERCE,
BUREAU OF FOREIGN AND DOMESTIC COMMERCE,
Washington, October 10, 1917.

SIR: There is submitted herewith a report by Consul Henry P. Starrett, stationed at Mombasa, British East Africa, on the markets for hardware and agricultural implements in the British Protectorates of East Africa and Uganda. This monograph, though prepared on the initiative of Mr. Starrett, is comparable in many respects to the 10 reports written under the supervision of the United States commercial attachés and previously published by the Bureau in its Miscellaneous Series. A similar report for Turkey, by Consul General Gabriel B. Ravndal, has also been issued recently. It should be noted that Mr. Starrett's report, unlike the others just mentioned, includes a discussion of the more important agricultural implements and machinery. The report was written June 22, 1917.

While the territory covered is one of relatively limited possibilities at present, certain of its agricultural industries are developing in a gratifying manner and it will absorb constantly increasing quantities of the articles considered in this pamphlet.

Respectfully,

B. S. CUTLER,
Chief of Bureau.

To Hon. WILLIAM C. REDFIELD,
Secretary of Commerce.

EAST AFRICAN MARKETS FOR HARDWARE AND AGRICULTURAL IMPLEMENTS.

I. INTRODUCTION: GENERAL FEATURES OF TERRITORY.

In describing the trade conditions of British East Africa and Uganda and the possibilities that this territory may have to offer as a field for American hardware and associated lines, it is well to draw attention to two important features that have a direct bearing on the character of the demand for such goods. The first is the topography and climatic conditions of the different sections of the country, and the second the two well-defined classes of buyers for whom the goods are intended—that is, the European and the native.

According to topography the country may be considered as consisting of three natural divisions: (1) The coastal belt, which is hot, very tropical, and quite unhealthful; (2) the highlands, at an average elevation of about 6,000 feet, enjoying a fairly equable climate with no great extremes of temperature and eminently suitable for European settlement; and (3) the interior lake regions, at an average elevation of about 4,000 feet, with a tropical climate but perhaps not so unhealthful as the coastal district. Each of these sections has its own variety of products, its peculiar conditions of climate, and each is inhabited by a different type of native that has been more or less brought under the influence of civilization and of good government.

The coastal belt produces coconuts, copra, sisal, and tropical fruits. Its population is composed of a mixture of Arabs, Swahilis, and other coast tribes. The lake regions produce cotton, coffee, rubber, cacao, and oil seeds, and the population is largely composed of different tribes of the Bantu Negro type. The highland plateau, however, gives greater promise for successful European settlement than do any of the other sections. It is here that most of the European farms are located, and products such as wheat, corn, flax, potatoes, and other vegetables are grown in abundance. The soil is exceedingly rich, the rainfall ample, and the climate salubrious. This might well be termed the center from which civilization and its advantages penetrate to the more remote and undeveloped parts of the country. It has often been said that the future prosperity of the colony will rise or fall with that of the highlands. From this brief sketch some idea may be formed of the differences in the character of the commercial demand originating in each section.

The market demand in each of the above-described sections is divided into two distinct classes—the European, which is the smallest except in the highlands, and the native. The native demand is far greater in present value than is the European, but the latter represents an increasing value in those things that are necessary for the better agricultural and industrial development of the country. The value of the native trade of the future, however, will depend upon the readiness with which a taste is acquired for civilized clothes and customs. The importance of such a development may be appreciated when it is stated that the vast majority of the 6,000,000 natives in the two Protectorates wear nothing but a strip of cheap cotton cloth around their waists or a kind of leather shawl hanging from the shoulder. Their possession of other civilized goods is equally small. Those natives who come into constant contact with Europeans are beginning to adopt more elaborate forms of dress, adding trousers or a coat, and sometimes even a pair of shoes.

The native demand for hardware has heretofore been confined to copper, brass, and bright steel wire, which is wound around the arms and legs (and sometimes around the neck) for ornamental purposes, and to cheap knives and novelties of one kind or another. Their huts are built of poles and grass, not even a nail being used; their cooking utensils are usually made of earthenware; and the simple agricultural tools they use were produced at some local native forge. As regards the last-named articles, at least, the possibility of the local supply has long since been exhausted and these tools, especially made for this trade, are now being supplied by European countries.

It is, therefore, clear that while the present importance of this trade, particularly in hardware lines, may not be large in comparison with that of other new countries, its real value lies in the possibilities of the future and in the development of the great agricultural resources of the country.

II. STATISTICS OF IMPORTS.

Purchases of hardware and related lines during the calendar year 1916, as compared with those for 1915, are shown in the following table. Quantities for 1915 are not available. Values are in United States currency:

Articles.	1915, value.	1916	
		Quantity.	Value.
Ammunition...number..	$10,042	1,117,251	$26,130
Arms...do....	13,309	372	8,082
Building materials, not otherwise enumerated...	62,748	...	9,430
Cement...hundredweight..	(a)	463	5,460
Cutlery...	(a)	...	52,678
Electrical apparatus...	(b)	...	26,572
Fencing materials...	(a)	...	12,662
Implements:			
Agricultural...	75,125	...	149,415
All other...		...	18,182
Hardware...	66,199	...	149,403
Machinery:			
Agricultural...	217,924	...	189,250
Industrial...		...	65,940
Metals:			
Brass and copper—			
Manufactures...	20,667	...	19,272
Wire...hundredweight..		168	6,466
Iron and steel—			
Manufactures...	196,826	...	116,976
Wire...hundredweight..		149	1,082
Galvanized-iron sheets...do....		4,405	33,744
Other—			
Manufactured...	(a)	...	38,293
Unmanufactured...	(a)	...	3,475
Railway and road material...	31,220	...	42,380
Telegraph supplies...	208,697	...	2,471
Toys and games...	(a)	...	9,556
Vehicles:			
Power—			
Agricultural...	219,383	...	5,288
All other...		...	152,470
Nonpower—			
Agricultural...		...	16,289
All other...		...	178,278
Total...	1,121,640	...	1,334,186

[a] Unclassed.

[b] Included with telegraph supplies.

The combined value of these articles represents 11½ per cent of the total import trade of the country during 1916. The increase in such imports amounted to about 20 per cent as compared with the preceding year. As the business of the country during the war period has been abnormal, these figures are not very satisfactory in gauging the actual needs of the country, for in many lines much greater quantities would have been purchased if shipping space could have been obtained. The figures rather represent the minimum with which the country could get along and indicate that a demand is accumulating which will find expression when conditions have returned to normal.

III. COUNTRIES SUPPLYING THE TRADE.

An analysis of the official statistics shows that more than 92 per cent of the arms and ammunition came from the United Kingdom, the United States furnishing only about 5 per cent. In normal years these are important items, since British East Africa is justly famous as one of the most accessible big-game preserves in the world. In 1914 these imports were valued at $135,000, while the total for 1916 was only $34,192, thus showing the effect of the war on this particular business.

Of the "building materials, not otherwise enumerated," about 90 per cent came from the United Kingdom, India and the United States furnishing most of the remainder. Eighty-five per cent of the cement came from the United Kingdom, 6 per cent from Denmark, and 5 per cent from Italy; the United States, so far, has not participated in this trade. Galvanized-iron sheets and plates are usually imported in large quantities, as most of the European buildings and all of the warehouses and service buildings are constructed of this material. In 1913 this item was valued at more than $280,000, as against only $33,744 during 1916. All of this came from the United Kingdom. The explanation for the great decrease in these items lies not only in the lack of shipping space to carry them but more largely in the greatly enhanced prices. The increase in some instances has ranged as high as 200 per cent. The result has been a restriction of building operations to absolute necessities. The difficulty in getting labor has also contributed to the almost prohibitive building cost.

Heretofore the United Kingdom and Germany have furnished most of the cutlery, but within the past two years American goods of this kind have been coming into the market and have given very good satisfaction. Only cheap and medium grades are in demand. The total trade in this item, however, is not large. Hardware shows an increase over the previous year of more than 100 per cent. About 70 per cent of this came from the United Kingdom and 20 per cent from the United States. It is of interest to note that the share of the United States in this item is increasing rapidly.

At the present time the demand for fencing materials is much greater than the supply, and it is evident that this condition will continue until after the war. The United Kingdom furnishes about 80 per cent of this material, most of the remainder coming from the United States.

The need for agricultural implements and machinery is readily apparent in a country that depends so largely upon its agricultural activity as the basis of its prosperity. In these items American goods are being imported in increasing quantities each year, especially as regards plows and farm machinery of all kinds. The market is small at present, but it is steadily growing. The United Kingdom furnishes about 60 per cent and the United States about 30 per cent of these articles.

There is always a steady market for brass, copper, and steel wire. The first two are used by the natives for personal adornment and the latter principally for industrial purposes. The United Kingdom and Germany have previously furnished most of these imports.

Railway and road making equipment has largely been furnished by the United Kingdom, but an increasing importation of the latter from the United States has been noted within the past two years. The country will eventually import large quantities of this material, and the share of the United States should be large. Tractors have not been used in any important way as yet, but certain of the European farmers in the highlands are beginning to show an interest in these machines, especially those of the kerosene-engine type. Most tractors have come from the United Kingdom, with a few from the United States. The importation of motor cars has increased very materially, and American cars dominate the market. Aside from wagons, the importation of other vehicles is small. The wagons have been coming from England in the past.

There is, of course, no manufacture of hardware articles in the protectorate.

IV. METHODS OF ENTERING THE MARKET.

The great distance of the East African market from America and the limited amount of hardware that could be sold even if an exporter were fortunate enough to obtain a relatively large share of the trade in any one line render it inadvisable to suggest that traveling salesmen be sent to canvass this field, unless a salesman should happen to be en route from South Africa to Bombay, in which case it would be convenient to call on the Mombasa importers during the two or three days the steamer lies in that port. As regards staple lines of hardware, it is probable that much business can be done by means of correspondence and well-illustrated catalogues giving all sizes and weights, full descriptions of materials, prices, discounts, terms, and, if possible, estimated through freight rates from New York to Mombasa. If such literature could be sent to all hardware importers in East Africa small trial orders would probably begin to reach the manufacturer either directly or through a New York or London indent house.

All correspondence and literature should be in the English language, and wherever possible English weights, measures, and currency should be used. It is highly important, moreover, that the fullest information be given with the first letter and catalogue, for if the manufacturer states that "prices and discounts will be supplied upon request" the probability is that he will receive no orders from East African importers, owing to the fact that it now requires nearly five months for a reply to be received from an inquiry sent to America. In such a case other manufacturers, who have been more careful in supplying all such information, will have been favored with the order. Correspondence and literature that do not show these details merely represent a complete waste of time and money so far as this market is concerned. Another complaint is that frequently an American manufacturer will interest a foreign importer in his goods and upon receipt of an order will reply that he does no direct export business, but only receives such orders through some export or indent house. It is obvious that such a manufacturer should state in his catalogue or correspondence the name of the New York house that handles his export business; otherwise the delay and annoyance caused the prospective customer will induce him to give the order to some other firm.

V. CARE IN SELECTING AGENTS.

Where it is desired that an agency be established the best results are obtained by the appointment of some European commission or indent house located in Mombasa or in Nairobi. Such a house is in a position to know the needs of the local market intimately; it can render invaluable service to the American manufacturer in the way of advising him as to the credit ratings of Indian or other importers, and it is often in a position to finance the orders that may be received from such buyers in cases where the manufacturer can not, or will not, give reasonably long terms. Such an agent ordinarily receives from 5 to 10 per cent commission on all sales, according to the nature of the article represented. Generally speaking, specialties pay the higher commission, while for standard lines 5 per cent is the usual rate. If an energetic agent is secured he should be given what is known as the "East African territory," which includes British East Africa, Uganda, German East Africa, and Zanzibar.

The volume of trade in these hardware lines would not warrant the establishment of either a branch house or a resident American agent.

VI. NECESSITY OF CAREFUL PACKING.

In shipping goods to East Africa the fact should not be overlooked that the distance from New York by the shortest route is not less than 10,000 miles and that under present conditions shipments from America must be transshipped at least once and sometimes twice before reaching Mombasa. At these transshipment ports—Durban (Natal), Liverpool, and Aden—goods are often very roughly handled and not infrequently even the strongest cases and crates are broken open. It is essential, therefore, that extra heavy cases and crates should be used and that, where the contents are liable to damage from atmospheric conditions or from rain, cases should be tin-lined or other efficient waterproof lining should be used, as well as waterproof wrapping around each piece inside. In the case of crated machinery of all kinds, all bright parts should be especially well protected from the effects of a severe tropical climate. Aside from the handling that shipments receive, there is always the possibility, in these days, of long delays on account of lack of forwarding space at transshipment ports.

It is gratifying to record that, contrary to the general opinion, local importers state that American packing is the best that now enters Mombasa. Importers are always glad to pay the extra cost for good packing.

VII. CUSTOMS DUTY—INVOICES.

Agricultural implements and machinery, fencing materials, industrial machinery, electric cable, wire, posts, and other material for generating and storing electrical energy are all admitted free of customs duty. All other hardware articles pay a duty of 10 per cent ad valorem on the cost of the goods c. i. f. Mombasa. Consular invoices are not required, but the manufacturer's or exporter's invoice should give full description of the goods, gross and net weights, prices, discounts, all charges, commissions, etc.

VIII. CREDIT INFORMATION.

There are no reliable commercial reporting agencies in the East African territory. Such information is usually obtained through the local banks, but inquirers should be careful to initiate their inquiries through their home banks, which, through their New York correspondents, would take up the matter with the New York branches of the Standard Bank of South Africa or the National Bank of South Africa, both having branches in East Africa. The National Bank of India is the only other bank doing business in that territory; its New York correspondent is the Anglo-American Bank. Those manufacturers who have connections with any of the more important local European indent houses can, of course, avail themselves of the information that such houses may be able to give them. Manufacturers should use the greatest discretion in granting terms to Indian importers on a more favorable basis than sight draft with bill of lading attached. The credit of many of these firms is beyond question and they have the reputation of meeting their drafts promptly, but unfortunately there are others that do not enjoy so favorable a position.

IX. SELLING METHODS AND PAYMENTS.

Because of the fact that the East African market is distant from the supplying countries and limited in volume of trade, few commercial travelers representing a single line of goods find their way there. Occasionally an agent from a London commission and export house, representing many and varied lines of goods, finds it profitable to pay an extended visit to the country, taking orders for almost every class of goods imported into the territory. The results from such a campaign, especially when generous lines of samples are carried, are much superior to anything that can be accomplished by catalogues and correspondence. Recently a representative of this character spent two months in the country and sent home orders amounting to approximately $50,000. His total expenses while in the country did not average more than $6 per day. He came from South Africa and went subsequently to India. His expenses from Durban to Mombasa amounted to about $130 and from Mombasa to Bombay about $150.

The bulk of the hardware trade, however, is done through the medium of jobbers' catalogues, orders being placed with some local or London indent house. This indent house will execute the importer's order, pay the home manufacturer for the goods, and draw on its East African customer for the amount at from 60 to 90 days' sight. Occasionally, where the order of a well-known importer is involved, the British manufacturer will receive the order direct and execute it on the same basis. But this is exceptional. In such cases the manufacturer must face the necessity of being without his money from the date of shipment until the proceeds of the 60-day draft reach him—a process that takes about five or six months. It is obvious that this practice is impossible for most manufacturers, and therein lies the necessity for the service that the indent or export houses are willing to render. So far as the East African market is concerned, there is no evidence to show that credit terms of the future are likely to be greatly reduced.

From necessity, most of the recent business with America in these lines has been on a basis of sight draft with bill of lading attached, and it is probable that this method may be continued until after the war, when European exporters will again be able to offer their goods on terms comparable to those that obtained before the beginning of hostilities. For some time past there has been a tendency toward somewhat shorter credit terms than were granted in previous years, but it is difficult even to attempt to prophesy what the situation in this respect will be when keen competition for trade shall have been reestablished.

X. MARKET FOR PARTICULAR LINES.

The following particulars concerning the lines of hardware actually offered for sale in the East African market have been gathered after a careful investigation of the subject. As will be seen, they cover the ordinary classes of such goods, in a variety that is somewhat surprising. It should be understood, however, that many of these goods are used only in very small quantities, while others, especially those suitable for the native trade, are imported in considerable amounts. The prices quoted are for the most part those of English jobbing houses and are net, f. o. b. shipping port in England. An endeavor was made to obtain the latest quotations—those for the early part of 1917—but changes have been so erratic and so frequent that in many instances only approximate prices could be obtained.

At present the freight rate from England to Mombasa on heavy hardware is $18.40 and on light hardware $26.28 per long ton (2,240 pounds). Freight rates on similar goods from New York to Mombasa were, on last quotations, about $1.40 per cubic foot.

SAWS.

American hand, circular, and crosscut saws have been popular in the East African market for years. Prices for English saws are as follows: Circular saw, extra cast steel, for wood, diameter 32 inches, thickness 12 Stubbs W. G., weight 26 pounds, price $9.36. Extra cast steel beveled or swaged circular saw, diameter 40 inches, 19 gauge on tooth, 10 gauge at center, price $19.82. The most popular sizes run from 24 to 60 inches in diameter. Crosscut saws with Great American, Lumberman, or Lance teeth, alloy crucible steel, 5 gauges thin to back, 6 feet long, handles not included, price $2.92 each; same saw made of silver steel, price $1.86 each. The bulk of the demand is for 5-foot lengths with American or Lightning teeth. Handsaw, straight back, made of silver steel, improved temper, blade breasted on tooth, mirror polish, beech handle, raised brass screws, 30-inch size, price $16.54 per dozen; same size and appearance but made of cast steel, $14.60 per dozen. Band saw, for wood, extra cast steel, set or spread teeth, width 5 inches, $0.61 per foot; same but narrow (1 inch wide), price $0.08 per foot. Whip or felloe saw, cast steel, machine ground, set and sharpened, 5 feet long, $1.46 each. Bucksaw, complete with web, handsaw tooth, $7.20 per dozen. Back or tenon saw, cast steel 10-inch blade, bright steel back, $9.73 per dozen. Compass or lock saw, beech handle, 16-inch blade, $3.16 per dozen. Hack-saw frame, bright malleable iron, for holding 10-inch blades, $4.26 per dozen. Hack-saw blade, ½ inch by 10 inches, standard pitch, 16 teeth to the inch, packed in boxes of 1 dozen, $5.22 per gross. All of the above are net prices f. o. b. English shipping port.

AXES, HATCHETS, ADZES, HAMMERS, PICKS.

Very few of the axes imported are from English manufacturers. Most of them come from the United States, with some small imports from Sweden, the latter selling at about the same prices as American. Both round-eye and oval-eye axes are sold, with the round eye most in demand. Popular weights run from 2 to 4 pounds. Axes weighing 3 pounds or more pay no customs duty, as they are considered to be agricultural implements. Below this weight they are classed as household axes and pay 10 per cent ad valorem duty. A leading importer states that there is a good market for straight-grained hickory ax handles, as there is no local wood suitable for the purpose. Such handles sell at wholesale in Mombasa for from $3.20 to $3.85 per dozen. A typical English ax on the market is described as steel head, half bright, blue or black, unhandled, 4 pounds weight, English price $9.45 per dozen. Details of other articles are as follows: Hatchet, No. 2, solid steel, extra quality, bright and blackened, selected handle, $6.56 per dozen. Carpenter's claw hammer, adze eye, solid cast steel, bright, polished hickory handle, weight 20 ounces, $6.08 per dozen. Hammers and sledges, fine crucible hammer steel, all weights, $8.70 per 112 pounds. Adze, best carpenter's, half polished, No. 2 size, $8.51 per dozen; ship-carpenter's adze, same, but throated, $10.95 per dozen. Pick, laborer's interchangeable, point and chisel ends, ground, No. 2 eye, weight 6 pounds, $11.20 per dozen; same price for double-pointed.

CHISELS AND PLANES.

Details of chisels and planes are as follows: Firmer chisel, cast steel, gas tempered, beech handle, ½-inch cutting edge, $1.56 per dozen; same but with 1-inch cutting edge, $2.15 per dozen. Firmer gouges, cast steel, gas tempered, ash or beech handle, ½-inch cutting edge, $1.78 per dozen; same but with 1-inch cutting edge, $2.31 per dozen. Socket firmer chisel, cast steel, all bright, polished hickory handle, beveled edge, extra finish, 1-inch edge, $5.41 per dozen. Gouge of same quality and description, same price. Mortise chisel, best quality cast steel, all bright, beech handle, ½-inch edge, $5.47 per dozen; same but with second-quality steel, $4.38 per dozen. Plane, jack, wooden, brass nutted, double irons, to 17 by 2¼ inches, $1.34 each. Smoothing plane, wooden, brass nutted, double irons, to 2¼ inches, $1.09 each. Trying plane, brass nutted, double irons, 2½ to 24 inches, $1.82 each. Block plane, iron frame, 7 inches long, cutter, 1¾ inches, price $4.38 per dozen; same but with adjustable throat block, $1.03 each. Universal plane, complete with 52 cutters, $18.90 each. Spokeshaves, double iron, hollow face, 10 inches long, 2⅛-inch cutter, $2.19 per dozen; same but adjustable and with raised handles, $3.41 per dozen. Drawknife, crucible steel, polished, blade 1½ inches wide, 10 inches long, $9.25 per dozen; same but made of cast steel, $6.76 per dozen. Cutting gauge, polished mahogany, plate headed, boxwood thumbscrew, adjustable steel cutter, $2.43 per dozen. Mortise gauge, rosewood slide with shield, $5.35 per dozen.

RULES, LEVELS, BEVELS, SQUARES, CRAMPS, HANDLES.

Boxwood rule, 2-foot, 4-fold, arch joint, 1⅛ inches wide, marked from $\frac{1}{16}$ inch up, $2.19 per dozen; same but with double-arch joints, brass-bound edges, $5.08 per dozen. Spirit level, iron, two plumb tubes, plain base, 15 inches, $1.64 each; same but made of wood, brass plated, tipped bottoms, 12 inches, $9.73 per dozen; same but with thinner plate and without tipped bottom, $6.81 per dozen. Sliding bevel, hardwood stock with brass flush lever, 8 inches, $3.41 per dozen. Try and miter square, hardwood stock, brass faceplate, graduated steel blade, 6 inches, $4.86 per dozen. Carpenter's steel square, made in one piece, tempered crucible steel, blued finish, size 24 by 2 inch body and 16 by 1½ inch tongue, graduated on edge from $\frac{1}{16}$ inch up, $1.46 each. Cramp, steel bar section, 2⅛ by ⅝ by $\frac{5}{16}$ inches, depth of jaws 2⅛ inches, length of bar 4 feet, $3.65 each. Sash cramp, T-section steel bar, length 48 inches, with peg and chain, $3.65 each. Ordinary round chisel handle, made of beech or ash, ¾-inch ferrule, $4.14 per gross; ordinary screw-driver handle, flat sides, polished beech, $0.73 per dozen; try-plane handle, English beech, $1.58 per dozen.

BITS, BIT BRACES, SCREW DRIVERS.

Auger bit, Irwin patent, made of high-grade bit steel, polished, ½ inch, $2.43 per dozen; ¾ inch, $3.41 per dozen; 1 inch, $4.38 per dozen. Ordinary auger bits, same prices. Expansion bit with two cutters, cutting from ⅞ to 3 inches, $1.95 each. Screw auger, Scotch pattern, bright, barrel eye, long shank, 1 inch, $6.32 per dozen. Bit brace, polished sweep, malleable jaws, 10-inch sweep, plain, $5.83 per dozen; same but with ratchet, $11.76 per dozen. Screw driver, cabinet, cast steel, 6-inch blade, $2.19 per dozen; 8-inch blade, $2.92 per dozen. High-grade ratchet screw driver, 6-inch blade, $6.32 per dozen.

PLIERS, SPANNERS, BOLT CLIPPERS, WRENCHES, DIES, TAPS, DRILLS.

Mechanic's pliers, black-ribbed handles, polished head, flat or round jaws, made of best steel, 6 inches, $2.92 per dozen: same, but with oxidized handles, $4.14 per dozen. Wire pliers, solid drop-forged steel, circle joint, heavy jaws, with raised side cutters and one wire cutter in joint, 6 inches, regular black finish, $2.92 per dozen. Blacksmith's shoeing pincers, best drop-forged steel, 12 inches long, black finish, bright jaws, $5.35 per dozen. Bolt clippers, No. 1, best steel, rubber buffers, length 2 feet, weight 5¾ pounds for three-eighth inch bolts, price $3.65. Cycle wrench, nickel plated, forged steel, case hardened jaws, $1.95 per dozen. Automobile wrench, Billings & Spencer's pattern, 9½ inches, $5.35 per dozen. Pipe wrench, similar to Stillson, takes 1-inch pipe, 10 inches long, 73 cents each. Spanners, ordinary, double ended, drop-forged steel, five to the set, total weight 1 pound 8 ounces, ordinary finish, $1.10 per set. Spanners, double ended, solid wrought steel, nut cap, seven-eighths by 1 inch, length 16¼ inches, unfinished, $4.86 per dozen. Stock and dies, engineer's, best quality, dies run from one-half to 1 inch, set contains five taps and five sets of dies as well as stock, set complete, $22.84 each set. American stocks and dies are the most in demand in the East African market. Taps, machine taper, crucible cast steel, one-fourth inch, 28 cents each; same, one-half inch, 49 cents each. Reamers, spiral fluted, one-fourth inch, 30 cents each; same, one-half inch, 49 cents each. Cold chisel, octagon tool steel, polished head and blade, hand forged, oil finish, length 6 inches, width of cut one-half inch, $1.22 per dozen. Hand drill, 12¼ inches long, drills from 0 to three-sixteenths inch, $1.46 each; breast drill, from 0 to one-half inch, $3.89 each. Drilling machine, Trojan No. 6 N, weight 10½ pounds, feed 1 inch, $4.38 each. Drill chuck, three jaws, holding capacity 0 to three-eighths inch, $1.22 each. Twist drill, straight shank, size one-eighth inch, length 3 inches, 49 cents per dozen; same but one-fourth inch size, length 4⅛ inches, $1.10 per dozen. Most of the fine precision tools used in East Africa are made in the United States.

FILES, BLACKSMITHS' TOOLS, ANVILS, VISES, JACKS, CHAINS.

Files and rasps, flat, half round, or square, rough or bastard, made of crucible cast steel, 6 inches, 85 cents per dozen; 10 inches, $1.83 per dozen. Heavy blacksmith's tools, about 12 cents per pound. Anvils, first quality, $9.73 per 112 pounds; second quality, $8.76 per 112 pounds. Bench vise, cast-iron, fitted with hardened-steel adjustable jaws, mild-steel screw, bolts and handle, No. 2, width of jaws 3½ inches, weight 21 pounds, $2.92 each. Trojan pipe vise, No. 2, capacity from one-fourth to 3-inch pipe, weight 26 pounds, $4.14 each. Pipe cutter, one wheel, No. 2, cutting from 1 to 2 inch pipe, $4.14 each. Jack, screw-lifting bottle, cast-iron body and head with wrought-iron screw, No. 2, 2-ton capacity, height when down 15 inches, weight 19 pounds, $2.19 each. The most popular chain in this market is an English weldless steel chain coming in 8-foot lengths with hook and ring. The wholesale Mombasa prices for these are—five-sixteenths inch size, breaking strain 2 tons 5 hundredweight, $4.07 each; one-half-inch size, breaking strain 6 tons, $6.02 each.

Double slings for log rolling in 6-foot lengths, size seven-sixteenths inch, breaking strain 4 tons 10 hundredweight, $11.35 each. A cheap weldless, clinch link chain in 8-foot lengths, sizes one-fourth and three-eighths inch, breaking strain 4,284 pounds, $1.62 each (Mombasa wholesale price). Because of the smallness of the oxen, a chain 7 feet 6 inches long would find a ready market. A dealer suggests also that there is a good market for an electrically welded chain that would compete with the high-grade weldless chain described above and that should sell at wholesale in Mombasa for about two-thirds the price of the other.

CUTLERY: SCISSORS, SHEARS, AND KNIVES.

Before the war a large percentage of the cutlery on the market was of German manufacture. At the present time most of it is supplied by English manufacturers. American cutlery is beginning to come in, and dealers are of the opinion that medium grades of these goods would sell well in East Africa. They state that there is a particularly good market for a safety razor, for instance, that would retail for about 5 rupees ($1.62) each.

Scissors, round bows, all polished, best drop-forged steel, 4 inches, $1.22 per dozen; 5 inches, $1.34 per dozen; 6 inches, $1.58 per dozen. Straight trimmers, nickel-plated blades and bows, 6 inches, $2.92 per dozen; 7 inches, $3.65 per dozen. Hairdressers', 6½ inches, $3.89 per dozen; same as last but American pattern and fully nickel plated, 7½ inches, $6.44 per dozen. Pruning shears, 9-inch size, $5.83 per dozen; 7-inch size, $4.62 per dozen. Garden shears, iron and steel blades, twisted shanks, polished handles, length of blade from center of rivet 9 inches, $0.73 each. Grass and sheep shears, single bow, all bright, 6 inches, $6.09 per dozen; same, but only half bright, $4.14 per dozen. Pruning knives, stag handle, 3-inch blade, $6.81 per dozen. Hair clippers, barbers', from $1.22 to $1.46 each.

GARDEN TOOLS.

In value of imports the most important garden or agricultural implements used in British East Africa are the so-called "jemby," or African hoe, and the "panga," a kind of machete. In previous years Germany has furnished most of these tools, but more recently English manufacturers have produced them, though at a much higher price. The "jemby" is made of one piece of steel; the blade is heart shaped and varies in size from 7 to 9 inches from the lower point to the beginning of the shank, and from 6 to 7 inches in width; the shank is carried straight up from the blade and is about 8 to 10 inches in length. The blade is about ⅛ inch thick at the edges and double that around the center, and is further strengthened by a short rib running down from the shank to just above the center of the blade. These tools are very rough and unfinished in appearance. More than 50,000 dozen per year are imported. If American manufacturers can make such a hoe at a price not to exceed 10 or 12 cents c. i. f. East Africa, they would be able to secure a good share of the market. Another, but better, hoe used in the protectorate is similar to that known to the American trade as the German garden hoe, but is not bent under from the eye. The demand is for the round eye, blade

7 inches broad at the edge and 10½ inches long including the eye, with a reinforcing rib running down into the blade under the eye. Weights run from 2 to 3½ pounds each. These hoes are imported without handles. The market consumes in ordinary years about 10,000 dozen annually. American manufacturers would have to quote a c. i. f. Mombasa price of around $4 per dozen in order to compete.

Pangas (similar to machetes) are sold in East Africa in two qualities—all-steel blade and steel-edge blade. The latter is preferred. The handle is of wood, 5 inches long, shaped for the hand, and should be well riveted to the blade. The blade is 18 inches long and comes either with round or square point. The present wholesale price at Mombasa for the steel-edge panga runs from 18 to 20 rupees ($5.84 to $6.49) per dozen. The market consumes nearly 100,000 dozen of these pangas yearly. Before the war these were furnished almost wholly by Germany and at prices much below those quoted above. They are at present coming from England. The market also uses, but to a much smaller extent, an English-made four-prong hoe weighing 3½ pounds, the wholesale Mombasa price of which is 24 rupees ($7.78) per dozen. This has a round eye and is imported without handles.

The English prices (f. o. b. shipping port in England) for other tools are as follows: Shovel, D handle, 28 inches, round mouth, blade forged from solid bar, 12½ by 10½, $7.05 per dozen. Grain scoop, riveted, D handle, 26 inches, 10-inch strap, blade 16 by 12 inches, self color, $10.95 per dozen. Spade, D handle, 28 inches, 16-inch strap, riveted, 12-gauge steel plate, 12 by 7½ inches, quarter bright, $9.73 per dozen. Digging fork, four prongs, D handle, $9.73 per dozen. Hay fork, strapped, two prongs, 10 inches long by 5½ inches wide, 6½-foot length, $6.32 per dozen. Scythes, patent or riveted, 36 inches, $10.95 per dozen; 42 inches, $11.55 per dozen. Snaith scythe, $6.08 per dozen. Common Cape sickle, saw-tooth edge, 20 inches, $1.46 per dozen; better quality, $1.95 per dozen. Lawn mower, Trojan, 12-inch cutter, $3.89 each; best quality, same size, $9.73 each. Trowel, bricklayer's, 10 inches, $6.56 per dozen. Mason's trowel, 10½ inches, $2.92 per dozen; pointing trowel, 6 inches, $1.58 per dozen; same but better quality, $2.92 per dozen. Watering can, galvanized, brass face rose, screw joint, 12 quarts capacity, $8.76 per dozen.

BUILDERS' HARDWARE.

Rim lock, bushed, sash ward, 7 inches, complete, $6.08 per dozen; 8-inch size, $9.22 per dozen. Mortise lock, thin japanned steel case, top tumbler, brass bolts and follow, reversible, 6 inches by ⅜ inch, $5.35 per dozen. Sash lock, japanned steel case, one lever, brass bolts, 2 to 3 inches, $8.28 per dozen. Night latch lock (similar to Yale type), japanned, three keys, $0.97 each. All styles and grades of padlocks are used, and American goods of this kind apparently dominate the market. Casement fasteners, iron, lever type, $0.49 to $0.97 per dozen; same, but made of polished brass, $1.46 to $2.92 per dozen. Casement stays, brass, 10 inches long, $2.68 to $3.98 per dozen; same, but of iron, $0.97 to $1.22 per dozen. Suffold latches, common, japanned, No. 3, $1.58 per dozen; same, but No. 5, $2.19 per dozen. As nearly all the windows in East Africa are of the casement type, these goods are in constant demand.

T hinges, bright steel, 6 inches, $0.53 per dozen pairs; 8 inches, $0.61 per dozen pairs. Strap hinges, 6 inches, $0.57 per dozen pairs; 8 inches, $0.73 per dozen pairs. Butts, wrought, 2 inches, $0.97 per dozen pairs; 3 inches, $1.82 per dozen pairs. Sash cord, flax, No. 3, $1.70 per gross yards; No. 5, $2.68; No. 7, $3.89. Sash cord of copper wire, No. 2, load 390 pounds, $8.51 per 100 feet; No. 6, load 77 pounds, $2.92 per 100 feet. Shelf bracket, japanned steel, center rib and brace, 6 by 5 inches, $0.36 per single dozen; same, 10 by 8 inches, $0.93 per single dozen. Ceiling hooks, tinned, 3 inches, $0.85 per gross; 4 inches, $1.14 per gross. Coat hooks, plain, electrobrassed, 6¼ inches, $8.75 per gross; of polished cast brass, 5 inches, $1.70 per dozen; 6 inches, $2.43 per dozen.

BOLTS, NUTS, NAILS.

Bolts, black cup square, ¼ inch diameter, 2 inches long, $0.61 per gross; same, but 4 inches long, $0.81 per gross. Square nuts, ¼ inch, $0.34 per gross. Bolt and nut for galvanized iron roofing, 1 by ¼ inch, $0.49 per gross. Fencing staples, ordinary galvanized, ¾ inch, 12 gauge, $0.61 per great gross; 1½ inches, 8 gauge, $5.35 per hundredweight (112 pounds). Practically all the wire nails used in British East Africa are from the United States. Sizes run from 1 to 6 inches. They are put up in 7-pound packages, 16 making one English hundredweight (112 pounds).

The present Mombasa wholesale price is 48 rupees ($15.57) per hundredweight.

OIL STOVES, LANTERNS, BLOW LAMPS, COFFEE MILLS, ETC.

There is an increasing use of small oil stoves, which are used for cooking purposes by the Indian population. A common type is of one burner, 12 inches high, English cost $12.89 per dozen; 2 burners, 9¼ inches high, $10.25 per dozen. Primus No. 4, spirit burner, capacity 1½ pints, weight 2¾ pounds, height 7¾ inches, $2.43 each. Hand or hurricane lanterns, oil, have always been popular, and one well-known American manufacturer has sold most of those now in use. The English lantern with tubular frame costs $5.35 to $6.32 per dozen f. o. b. England. Coffee mill, hand, square box, brass hopper, crank on top, size No. 1, $1.09 each; a cheaper grade at $4.86 per dozen. Blow lamp, Lamb No. 2, full size, $1.95 each. Cash boxes in small sizes are in constant demand and are now largely supplied by England. Typical grades on the market are a japanned box with tumbler lock, two keys, 8-inch size, $0.49 each; 10-inch size, $0.69 each; and a still cheaper grade at $4.86 per dozen. There is a good demand for rabbit traps, especially for one with a galvanized-iron plate, brass catch, iron setter, and without chains, 4-inch size, English price $1.70 per dozen.

SCALES.

Many kinds and qualities of household scales or balances are on the market, the most used being the common long-arm balance with scoop on one side and weights on the other. It weighs up to 2 pounds, and the English price is $0.97 each. Platform scales mounted on two to four wheels, to weigh 4 hundredweight (English) cost $27.15 each.

KITCHEN UTENSILS AND ENAMELED WARE.

The market in kitchen utensils and enameled ware is largely confined to the ordinary types of kettles, pans, and pails. Before the war Germany supplied large quantities of the cheaper grades of enameled ware. This trade has lately been supplied by Great Britain and the United States. Although a fair number of aluminum utensils are sold, they apparently do not give the same satisfaction as the enameled goods, for the reason that they are more expensive and require much more labor to keep clean. Among the Arabs and the coast tribes utensils made of copper have been used almost entirely in the past, but the difficulty in getting supplies has forced the increasing use of the modern articles. English prices for representative lines are as follows: Kettle, made of best block tin, seamless, copper body and bottom, capacity 4 pints, $5.35 per dozen; capacity 8 pints, $8.51 per dozen. Saucepan, deep, made of aluminum, wire edge, polished outside, frosted inside, tubular handle, diameter 6½ inches, capacity 4 pints, $4.14 per dozen. Saucepan, wrought steel, enameled, mottled outside, white inside, No. 7, capacity 8 pints, $6.56 per dozen; same, but capacity 12 pints, $8.03 per dozen. Oval pot, same material as last, capacity 3 gallons, $14.60 per dozen; same, but capacity 5 gallons, $18.98 per dozen. Stew pan, same material as last, No. 6½, capacity 8 pints, $7.78 per dozen; same, but capacity 12 pints, $10.70 per dozen.

ROOFING MATERIAL AND WALL BOARD.

The most noticeable brands of roofing in the market are an American make, "Rubberoid," and "Rok"—the last two said to be made in England. The English roofing sells for about 10 rupees ($3.24) less per roll than the American. These brands about divide the market, which is, of course, rather small. Each of these roofings usually comes in two grades, one for warehouses and similar buildings and a much better grade for residences. The first comes in rolls 36 inches wide, containing 216 square feet, and sells at wholesale in Mombasa for 46 rupees ($14.92) per roll. The better grade is 18 inches wide, in rolls containing 116 square feet, and sells for the same price per roll. An important dealer states that there is a small market for a good asbestos roofing tile. Those at present on the market are of English manufacture; they come in two colors, red or gray, and measure 15¾ inches square by one-eighth inch thick, weighing 280 pounds to 100 pieces. The wholesale Mombasa price for these tiles is 32 rupees ($10.38) per 100. There are several varieties of wall boards on the market, but a well-known American make probably supplies a large share of the trade, although the total demand for this material is not large. This comes in sheets 32 inches wide and in 6, 7, 8, 9, and 10 foot lengths. The most popular are the 7-foot lengths, which sell at wholesale at Mombasa at 6.25 rupees ($2.03) per sheet, and the 9-foot lengths, which sell at 8 rupees ($2.60) per sheet.

*GALVANIZED IRON—WIRE AND WIRE NETTING.

East Africa has always been a large consumer of galvanized sheeting for building purposes, and the demand is greater to-day than ever. During the past six months it has been exceedingly difficult to get stocks from England, which supplies most of the trade in this material. The corrugated iron used is of 24 gauge and put up in bundles containing approximately 80 running feet. The lengths are 6, 7, 8, 9, and 10 feet, and the number of sheets in each bundle are 14, 12, 10, 9, or 8. The wholesale Mombasa price at present is 78 rupee cents ($0.25) per foot.

Wire of all kinds has been difficult to get within the past year, the greater part of this material being supplied by the United States, although most of the woven-wire fencing comes from England. The Mombasa wholesale price for 12-gauge barbed wire in coils of 112 pounds is 17.50 rupees ($5.68) per coil; plain galvanized wire, gauges 6 to 12, in coils of 112 pounds, 25 rupees ($8.11) per coil. There is a fairly large demand for this plain wire. The development of the sisal industry in East Africa and the need for a 17-gauge binding wire for the sisal bales creates a large demand for this wire. It comes in rolls of 28 pounds and of 112 pounds. The latter sell (wholesale) at 50 rupees ($16.22) per hundredweight (112 pounds). Ordinary galvanized wire netting comes in rolls of 50 yards. The 16-gauge is of 1½-inch mesh and in 3 and 6 foot widths, the first selling for 36 rupees ($11.68) and the latter for 72 rupees ($23.36) per roll. The 18-gauge is 4 feet wide and of 1-inch mesh and sells for 47 rupees ($15.25) per roll. The 19-gauge comes 3 feet wide, ½-inch mesh, price 48 rupees ($15.57) per roll; 3 feet wide, 1½-inch mesh, 24 rupees ($7.78); and 6 feet wide, 1½-inch mesh, 36 rupees ($11.68). All of this fencing comes packed in pitch paper. Pig or sheep fencing comes in 50-yard rolls, 15 and 16 gauge, 2 and 3 feet wide, and of 3-inch mesh, with an extra strand running through the center lengthwise to strengthen it. There are no stocks of this netting in the market at the present time, and the last English quotation was $2 per roll f. o. b. ship in England. It is probable that, if properly introduced, American wire fencing and netting would find a ready market in East Africa.

CEMENT.

The cement at present on the market is of English production, with a few importations from Italy and France. The English cement comes in casks or in iron drums containing 400 pounds each, the present price for the former being 26 rupees ($8.43) and for the latter 28 rupees ($9.08) per 400 pounds. The market is very short of this material, but it is probable that not much relief may be expected until freight rates are lower. Many building operations that are contemplated have been indefinitely suspended owing to the present prohibitive cost of this material.

WAGONS, CARRIAGES, AND WHEELBARROWS.

The importation of vehicles and parts decreased nearly 43 per cent during 1916 as compared with the imports of the previous year, although the share of the United States in this trade increased from 14 per cent to 34 per cent of the total. For some years past American light wagons, buggies, and buckboards have been very popular in the East African market, owing to the efforts of an American commission house. The present high freight rates, however, have more than doubled the retail prices and have forced the demand down to the very minimum. A full-size, high-grade buggy sold in

Mombasa for 450 rupees ($146) before the war, the present price being exactly double. A light three-spring wagon with movable seat, capacity 800 pounds, previously sold for 425 rupees ($137.88), the present price being 900 rupees ($292). A high-grade buckboard sold for 400 rupees ($129.77), the present price being 800 rupees ($259.54). A two-wheeled cart, with upholstered seat and coil springs, sells for 250 rupees ($81.10); same but without upholstered seat and with slat foot-rest, 175 rupees ($56.77). These last two items are very popular, and large numbers could be sold if the prices were about 40 per cent less.

There is always a large demand for jinrikishas, but these are nearly all made in the country, the wheels, springs, and tops being imported. They sell for 550 rupees ($178.44) to 750 rupees ($243.32). A few have been imported from South Africa, but they are of a smaller type and not so well finished; they sell for 500 rupees ($162.22) each.

There is a good demand for heavy farm wagons very strongly made. One now on the market is 10 feet 6 inches long, capacity 5,000 pounds, and weighs 1,495 pounds, the local price being 1,150 rupees ($373.09). As a great many wagons are made in the country, there is a good demand for heavy wagon wheels and axles. A set now on the market consisting of two wheels, 42 by 2½ inches, with axle, sells for 170 rupees ($55.15). Carriage and wagon accessories are mostly imported from England, although springs, wheels, axles, and some hoods come from the United States.

There is an ever-increasing market for wheelbarrows and scrapers for road and railway work, the largest users being the public works department and the Uganda Railway. American goods of this type have long been popular in East Africa. An all-steel tubular barrow, capacity 3 cubic feet, weight 65 pounds, sells for 27:50 rupees ($8.92); wooden barrow, weight 52 pounds, price 17:50 rupees ($5.68); plain drag scraper, capacity 7 cubic feet, weight 98 pounds, bowl from top of back to cutting edge 34 inches, width 33 inches, depth 10 inches, price 37:50 rupees ($12.17) each.

MOTOR CARS, MOTORCYCLES, BICYCLES, TIRES, AND ACCESSORIES.

Considering the relatively small European population of the two protectorates, the motor-car business has made rapid progress during the past three years. The total annual requirement, however, is not large, and the lack of good roads through the country tends to restrict the demand. There are a few very expensive cars in the country, but the vast majority are of the type that sells for around $360 and $600 in the United States. American cars of this type dominate the market. The present cost of shipping these cars from America is a serious handicap to any great expansion of the business for some time to come, as for even the cheapest car this cost amounts to more than $500 per car.

Motorcycles are used not only by the Europeans, but by Asiatics and occasionally (in Uganda) by natives as well. They are a very popular means of conveyance, especially among government officials whose duties necessitate long journeys over indifferent roads and through hilly country. In normal years most of these machines came from England, but since the beginning of the war two well-known

American makes have made rapid progress in their sales, and very recently a Swiss machine has been imported, although so far only a few have been sold. Many people who have purchased American machines complain that the smaller sizes are not powerful enough for the country, on account of the difficult roads and numerous hills, and that the higher-powered machines are too heavy. Differences in home prices for machines of the same kind and power imported from the various countries are more or less evened up by the high freight rates, and at present the motorcycles retail on the East African market at approximately the same prices—1,800 to 3,000 rupees ($583.97 to $973.30) each.

Bicycles are in greater demand than is usual in new countries. The great majority are imported from England and sell for 150 to 215 rupees ($48.66 to $69.75) each. They are usually of the three-speed type, with hand brakes, and furnished with mud guards. They are used by all classes of people and all through the country. It is probable that the demand is increasing year by year. American manufacturers who may be interested in this market should be careful to meet the requirements as to hand brakes and mud guards. Coaster brakes are not popular, largely because they have never been used to any extent.

Motor-car and cycle accessories and tires are supplied by England, the United States, and to a much less extent by Italy. The most important item in this line is probably bicycle tires, of which thousands are imported annually. Medium grades are most in demand—those that sell at wholesale in England for 7s. 6d. ($1.82) each. A ribbed tread running with the tire is the most popular.

AGRICULTURAL IMPLEMENTS AND MACHINERY: INTRODUCTION.

The largest users of agricultural implements and machinery are the European farmers who have settled in British East Africa and Uganda during the past 10 years. Just before the war the importation of all kinds of agricultural equipment had been increasing very rapidly, amounting in 1914 to more than $230,000, as against only $149,415 in 1916. The decrease is explained by the fact that most of these settlers have joined the military forces, leaving their families or hired men to operate the farms. The result has been that very little expansion has taken place. To this difficulty has been added the abnormal prices for all such goods and the fact that the labor question has become acute through the recruiting of natives into the carriers' or porters' corps for the military campaign in German East Africa. British East Africa is essentially an agricultural country, however, and the situation of to-day can only be looked upon as a temporary condition that will end at the termination of the war. Thousands of acres of rich land have been taken up by settlers who are planning to put most of this under intensive cultivation in the near future. The protectorate government is at present studying a comprehensive plan for the settlement upon the land of soldiers who have served their country, the idea being to furnish them with a reasonable acreage and to assist them to finance these farms by loans or otherwise. Upon the result of these efforts will depend to a large extent East Africa's place among the agricultural countries of the world, and this place should be assured by reason of the enormous amount of rich land available for cultivation and the wide variety of products that this land can produce.

Up to the present time practically all of the agricultural implements and machinery have been furnished by the United States and England, and, as most of the English plants are now devoted to other purposes, local importers have recently depended almost wholly upon American manufacturers for their supplies. As a general rule only the best of the American implements have been imported, with the result that their reputation is high and is likely to endure. The following descriptions of implements now on the market show the kind and qualities most in demand. All such goods are sold to the consumer on a cash basis—that is, payment within 30 days from date of sale—there being so far no urgent need for credit arrangements such as are offered in the United States and Canada. The importers buy the goods from the foreign manufacturer on the same basis as other hardware lines. Prices quoted below are retail prices in East Africa.

PLOWS, HARROWS, AND CULTIVATORS.

Lift gang, double-furrow plow, steel frame, wheel cutters and rear-wheel attachment, cut 24 inches, weight 555 pounds, price 275 rupees ($89.22). Lift sulky moldboard plow, single furrow, cut 14 inches, weight 395 pounds, price 215 rupees ($69.75). Two-way sulky plow, cut 12 inches, weight 567 pounds, price 155 rupees ($50.29). Moldboard sulky plow, 13-inch cut, weight 495 pounds, price 155 rupees ($50.29); same but 17-inch cut and weight 528 pounds, price 160 rupees ($51.91). Heavy moldboard plow, extra-heavy wood beam for breaking land, cut 12 inches, weight 170 pounds, 250 rupees ($81.11). Orchard plow, steel beam and frame, weight 98 pounds, 100 rupees ($32.44). Heavy grub breaker plow, wood beam with forecarriage and levers, cut 24 inches, weight 420 pounds, price 250 rupees ($81.11). Disk plow, three wheels, single furrow, 26-inch disk, weight 690 pounds, 195 rupees ($63.26); same, but with double disks, weight 825 pounds, 275 rupees ($89.22); same, but with three disks, weight 1,042 pounds, 325 rupees ($105.44); same, but with four disks, weight 1,146 pounds, 425 rupees ($137.88). Reversible single-disk (26-inch) plow, weight 580 pounds, 205 rupees ($66.51). Twin-disk reversible plow, weight 730 pounds, 225 rupees ($73). Disk harrow, 4-foot cut, 8 disks, weight 303 pounds, 125 rupees ($40.55); same, but with 16 disks, 9-foot cut, weight 576 pounds, 235 rupees ($76.24). Zigzag spike harrow, 60 teeth in three sections, width 9½ feet, weight 160 pounds, 125 rupees ($40.55); same, but with 80 teeth, four sections, width 12½ feet, weight 215 pounds, 165 rupees ($53.53). English zigzag spike harrow, 80 teeth, four sections, weight 500 pounds, 16 feet wide, 175 rupees ($56.77).

Five-tine cultivator, steel frame, wooden handles, forewheel, weight 66 pounds, 45 rupees ($14.60); same, but with nine tines, weight 85 pounds, 55 rupees ($17.84). Light disk surface cultivator, mounted, with seat, levers, etc., all steel, six disks, weight 462 pounds, 400 rupees ($129.77). Spring-tooth cultivator, seven spring teeth, with handles and levers, weight 65 pounds, 35 rupees ($11.35). Combined tooth cultivator and harrow, 14 teeth, steel frame, handles and forewheel, weight 61 pounds, 45 rupees ($14.60). Single-row disk corn drill, edge drop, weight 100 pounds, 75 rupees ($24.33). Double-row drill, mounted, shoe planter, seat, steel frame and wheels, weight 356 pounds, 235 rupees ($76.24).

MOWING MACHINES AND BALING PRESSES.

Only a very few mowing machines are in use in East Africa. One on the market is of very good English make, medium size, and sells for about 450 rupees ($146). The demand for grain harvesters, thrashers, loading machines, etc., is not large enough to warrant dealers in carrying stocks. Most of those in use are of American manufacture. The demand for baling presses is small at present, but the development of the sisal and cotton industries will soon require both hand and power presses of different sizes. A hand-lever press on the market bales hay to 40 pounds and upward, size of bale being 14 by 18 inches by any length up to 46 inches, estimated output 12 bales per hour, weight of press 340 pounds, price 200 rupees ($64.88). A small handpower winnower sells for 225 rupees ($73).

WINDMILLS, SHELLERS, CORN MILLS, CANE MILLS, SPRAYERS.

The demand for windmills is small, but a certain American make is well known in East Africa. The most popular is a 12-foot mill with a 40-foot tower and pumping about 400 gallons per hour with a 15-mile-per-hour wind, price 800 rupees ($259.55). Corn sheller, hand or power, double feed, with automatic shaker, bagger, and elevator, 300 rupees ($97.33). Hand sheller, single feed, 200 rupees ($64.88). Single corn sheller, small size, hand, all iron, to be fixed to a box or barrel, 15 rupees ($4.86). Power corn grinder, mounted on iron stand, size of stone 14 inches, pulley 8 by 4 inches, speed 700 to 750 revolutions per minute, approximate weight 550 pounds, price 500 rupees ($162.22). Hand grinder mounted on stand, large flywheel, weight 140 pounds, 120 rupees ($38.93). Chaff cutters, English make, hand power, mounted on cast-iron frame, 7-inch rising springs, 35-inch flywheel, ⅜-inch cut, 75 rupees ($24.33). Small horsepower cane mill (similar to the "Chattanooga"), 150 rupees ($48.66). English sprayer, knapsack type, brass, holds 3¼ gallons, 60 rupees ($19.47). Large-size sprayer, mounted on wheels, with handles, pump and long pipes, holds 50 gallons, 375 rupees ($121.66). Portable kerosene-oil engine, mounted on four-wheel truck, 2¼ horsepower (English rating), 800 rupees ($259.54); same, but 3½ horsepower, 900 rupees ($292).

DAIRY MACHINERY.

Most of the dairy equipment on the market is of Swedish manufacture, with some English and American makes occasionally sold. Swedish Alfa Laval separator "Viola" No. 3, capacity 14 gallons per hour, price 150 rupees ($48.66); same, but with capacity of 22 gallons per hour, 200 rupees ($64.88); capacity 33 gallons per hour, 250 rupees ($81.11); 45 gallons, 300 rupees ($97.33); 66 gallons, 400 rupees ($129.77); 90 gallons, 500 rupees ($162.21); 132 gallons per hour, 700 rupees ($227.10). English-made barrel butter churn, end-over-end type, capacity 9½ gallons, 110 rupees ($35.68). Alfa Laval centrifugal churn, capacity 4½ quarts in three minutes, 40 rupees ($12.98) each.

COFFEE MACHINERY.

It has been stated that there are nearly 40,000 acres of land devoted to the coffee industry in British East Africa and Uganda. Most of this acreage, of course, is young and not in bearing, but each year notes an increasing importation of coffee pulpers and washers of various kinds, though seldom, if ever, of a very elaborate or expensive character. All of this equipment has heretofore been supplied by English manufacturers. During the past year there has been considerable difficulty in having orders filled, and dealers in East Africa believe that certain American-made machinery of this type would meet with favor. The following descriptions are of English machines now on the market, and the prices are net f. o. b. ship at English shipping ports:

Coffee pulper, power, capacity 4,800 pounds cherry coffee per hour when driven at a speed of 120 revolutions per minute, price with ordinary breast, $126 each. Pulper, hand or power, small size, ordinary breast, price $88. Pulper, "Jamaica," hand, with ordinary breast, $60. Pulper, "La Colombia," small hand power, to sit on table or box, $38.50. Pulper, single disk, hand, flywheel and two handles, disk covered with copper, $82.50; same, but with double disks, $132. Vertical tank washer, steel, capacity 10 hundredweight of fermented coffee in 10 minutes, $143. Coffee-drying machine, Guardiola's system, 10 feet long, capacity 7,000 pounds of wet coffee per charge, price $1,468. Improved fire heater for the foregoing dryer, $1,732. Small coffee-drying machine with fire heater, fan, and hand driving gear, capacity 500 pounds of wet coffee per charge, $330.

MACHINERY EMPLOYED IN SISAL INDUSTRY.

The sisal industry is of constantly growing importance in British East Africa. It is expected that the exports from that territory in 1918 will amount to more than 10,000 long tons. The principal decorticating (extracting) machines in use in East Africa are the "New Corona," "Robey," "Mola," "Finnigan-Zabriskie," and a few old raspadors. Before the war the machine in highest favor was the "New Corona," but the improvements that have been effected recently in the "Robey" appear to render it more efficient than the "New Corona" in both quantity of output and quality of extraction.

The "New Corona" is made by Krupps, Germany, requires about 30 horsepower to operate, extracts about 2 tons of dry fiber per day of 10 hours, and cost, before the war, about $3,800 at Hamburg packed for export. The "Robey" is an English machine, requires 40 horsepower, extracts about 2½ tons of fiber, and costs about $4,000. The "Mola" is another German machine much favored in German East Africa, and requires 48 horsepower to operate it. It is a high-speed machine and extracts nearly 3 tons of fiber per day. Planters state that owing to its high speed the quality of extraction is not good, although this fault is remedied if the output is confined to about 2½ tons per day. The cost is about $3,200. The "Finnigan-Zabriskie" costs approximately $3,500, and its fiber extraction capacity is only a little more than 1 ton per day. It is one of the pioneer machines in the East African field and has done excellent work, but is now being replaced by "Robey" machines. The old raspadors are also being abandoned, as their efficiency is not to be compared with that of the other machines.

The power plants are of nearly all types—steam, suction gas, oil, and gasoline. Where fuel is abundant and cheap the steam plant is preferred, suction-gas engines being next in favor. Crude oil is not obtainable in the country and petrol (gasoline) is expensive—about 2 rupees ($0.65) per gallon. It has been suggested that in certain localities kerosene engines could be profitably used, for kerosene sells for about one-half the price of gasoline.

Pumping machinery is of the usual type, there being no abnormal working conditions that require special construction. Beating and cleaning machines are often of home construction, although several have been imported from England, the cost being relatively low in comparison with that for the decorticating machines. Baling equipment is operated both by hand and by power, the English Shirtliff "Bijoli" press apparently being the most popular. There is a good field for small, low-priced baling machinery, operated by power.

Plantation railways are equipped both with push cars and with small steam or gasoline engines. A rule-of-thumb method of calculating the total cost of such equipment, including cars, laying track, etc., is approximately $1,200 per mile for a plantation having not less than 4 miles of track.

COTTON-GINNING MACHINERY.

In the Protectorate of Uganda the cotton industry has forged ahead with remarkable rapidity and bids fair to become an important factor in the world's production, yielding an excellent variety of Upland cotton. During the fiscal year 1915, the banner year for Uganda cotton, 107,139 hundredweight of ginned and 30,188 of unginned cotton were exported. British and Indian capital has been invested in the ginning plants that are scattered throughout the territory at producing and marketing centers. There are now 21 power ginneries and 70 hand gins, very few of the latter being in use. Practically all of the gins and presses are of British manufacture, the individual capacity of the larger plants averaging not more than 250 full-pressed bales per week. The total machinery equipment of the 21 power ginneries consists of 180 roller and 33 saw gins, 18 baling presses, 16 seed openers, and 3 delinters. Three of the plants are operated by steam, 10 by oil engines, and 8 by suction gas engines. The percentage of lint to seed cotton obtained by the ginneries varies with the season, the locality, and the equipment of the plant. During the year 1916 these percentages ranged from 28 to 33 per cent. The product is packed 420 pounds to the bale, wrapped with heavy burlap, and bound with seven iron straps.

NOTE.—In connection with the foregoing report, Consul Starrett transmitted lists of commission agents, hardware dealers, and importers of agricultural implements in British East Africa and Uganda. These may be obtained upon application to the Bureau of Foreign and Domestic Commerce or its district or cooperative offices. Inquirers should refer to file No. 92413.

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DEPARTMENT OF COMMERCE
BUREAU OF FOREIGN AND DOMESTIC COMMERCE
B. S. CUTLER, Chief

SPECIAL CONSULAR REPORTS—No. 79

OLIVE GROWING IN SPAIN

DESCRIPTION OF VARIETIES GROWN, METHODS OF CULTIVATION, AND THE PREPARATION OF PICKLED OLIVES

BY

WILBUR T. GRACEY
American Consul at Seville, Spain

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LETTER OF SUBMITTAL.

DEPARTMENT OF COMMERCE,
BUREAU OF FOREIGN AND DOMESTIC COMMERCE,
Washington, December 10, 1917.

SIR: There is submitted herewith a report on the olive industry of Spain, prepared by Wilbur T. Gracey, American consul at Seville. The Seville consular district embraces Andalusia, the most important olive-growing district in Spain, from which large quantities of pickled olives are shipped to the United States. Mr. Gracey, who has been stationed at Seville during the last three years, gives in this report information that will be of particular interest to the olive growers of California and also to importers and dealers in pickled olives in the Eastern States.

Respectfully,

B. S. CUTLER,
Chief of Bureau.

To Hon. WILLIAM C. REDFIELD,
Secretary of Commerce.

OLIVE GROWING IN SPAIN.

INTRODUCTION.

The olive is one of the leading fruits of the world and one of the oldest known food products. Historians relate that the Romans mentioned it as existing in Spain when the peninsula was in Roman hands. Olive trees over 1,000 years old are said to be growing in Spain and some are believed to date back to the days of the Romans.

The olive grows on a small tree of the family Oleaceæ, known as *Olea Europæa*, which is the most important member of the family. The nativity of the olive tree is generally accredited to western Asia, and it probably came originally from the Mediterranean region. It grows to a height of approximately 25 feet, has small lanceolate leaves and axillary racemes of fragrant yellowish white flowers, followed by the oval, oblong, or heart-shaped fruits.

Olives are largely used in Spain for making oil, but this report deals mainly with the olive in brine as a commodity of commerce. As the olive succeeds best in a warm, dry climate, Spain, especially the Seville district, is particularly suited to its cultivation.

FAVORABLE CONDITIONS OF CLIMATE AND SOIL.

The olive tree in western Europe thrives in the open as far north as latitude 46°, but does not bear regularly or abundantly beyond 44°. Toward the south the size of the tree and regularity of the yield increases until latitude 18° is reached, beyond which the tree, though growing luxuriantly, does not produce fruit. Spain, lying between 36° and 44° of north latitude, is well situated for the growing of olives throughout its entire territory. The part of Spain which produces the largest quantities and the best quality of olives, and with the greatest regularity, is Andalusia, which with the Provinces of Cadiz, Badajoz, Caceres, and Huelva forms the Seville consular district. This district produces nearly one-half of the olives grown in the Kingdom.

WARM WEATHER NEEDED TO MATURE FRUIT.

In order to mature, the olive requires a certain number of units of heat during the period of active vegetative life, beginning with the first appearance of the blossoms and ending with the first severe frost. The number of units (each of 1° C.), which varies with different varieties of olives, ranges from 3,400° to 3,978° C. It is computed by adding the mean temperature of each day during the period between blossoming (which requires a temperature of 19° C.) and the first frost. Any district in which the sum of the daily mean temperature will amount to 3,978° during that period is adapted to olive culture. The limit of low temperature is 7° to 8° C., which must not last more than eight consecutive days.

Taking the mean temperature of the summer months and the time of blossoming in any place, the time of maturity for olives may be deduced therefrom. Thus in Seville the olive tree blooms about May 1, and the mean temperatures are 23.8° for May, 24.1° for June, 29.2° for July, 30.1° for August, and 29.3° for September. The mean monthly temperature is 27.3°, which multiplied by the number of days, 153, gives a total of 4,177°; hence the fruit in Seville usually matures about the first of October.

COMPOSITION OF SUITABLE SOILS.

It is said that the soil most suitable for olive culture contains 35 parts lime, 35 parts sand, 25 parts white clay, and 5 parts organic materials. The soil should be permeable, thus allowing freedom to the roots.

A Spanish agricultural chemist has made a careful chemical analysis of the composition of the olive tree and fruit, which shows that there is an abundance of potash in the fruit and a large portion in the trunk, branches, and leaves; that anhydrous phosphoric acid is largely present in the wood, and is also found in smaller quantities in the leaves and fruit; that lime occurs in the leaves and in the wood, with very little in the fruit. Soda is present in both the wood and fruit, and nitrogen in the leaves, with lesser quantities in the wood and fruit. The analysis of the ashes showed that the substances most abundant were lime and potash.

Olives should never be planted in marshy land or on land that is too dry, for in either case they will grow poorly and have small crops. Undoubtedly rich, deep, fertile land is best for olive culture, but the trees will also produce well in dry land, though not in soil containing a preponderance of gravel.

Soil containing lime is more suitable than that with schist or granite, and that which retains moisture best in summer is to be preferred. Generally speaking, the most suitable soil has a depth of fairly fertile earth of not less than 1 meter (3.28 feet), in order to give sufficient root space. Compact or hard soil is never suitable, for in damp situations it does not dry properly and gives the roots an excess of moisture, and in dry places it has an opposite effect, which is also prejudicial to successful cultivation. It is not true, as some writers have said, that the olive will thrive anywhere and that it prefers soil of an inferior quality. While the trees may thrive in poor soil, they will produce small crops, with the fruit and oil of an inferior quality.

In general, soil that is suitable for the grapevine is also well suited to olive culture. In the colder districts an excess of carbonate of lime is considered a drawback, as the white color of such soils prevents the absorption of heat. The presence of oxide of iron in the soil is preferred, as it gives the earth a reddish tinge and corrects this difficulty, and it is on such soil, Seville planters state, that the largest yields are obtained in the northern districts. Magnesia and sulphate of lime are considered efficient substitutes for carbonate of lime, and some sulphate may always be advantageously applied with the manure. Oil produced from soils poor in these ingredients usually has a greenish tinge, and is not as limpid as oil from soils containing them. Potash is considered a necessary constituent for olive culture, and when not present in sufficient quantities is artificially supplied. A deficiency of phosphates in the soil is usually evidenced by exuberant flowering and aborting of the fruit.

The hygroscopic property of the soil is an important factor, with which, however, must be considered the general climatic conditions. In the Seville district it is thought that the soil best adapted to olive culture should retain its looseness after a rain of 48 hours' duration, and that during the summer, which in that district is very warm (the thermometer occasionally registering 150° F. in the sun or 120° in the shade), the soil should retain 10 per cent of its weight in water.

No irrigation of olive land is resorted to in the Seville district, dependence being placed on the slight rainfall or dews in the summer and on the heavier rains of the early spring.

SITUATION OF OLIVE ORCHARDS.

Olive trees do not grow well near the seacoast on account of the sea winds. Hillside situations seem to be best, though large numbers of trees are grown and do well on level land. They should be planted at least 2 or 3 kilometers from the sea and in the most sunny situations.

VARIETIES OF OLIVE TREES GROWN.

In Spain 21 different varieties of olive trees, known under more or less general names, are grown. These names are given to trees of distinctive classes, but generally trees with certain peculiarities bear the same general class of olives and have similar names in the various Provinces.

The 21 varieties are: The Manzanillo, Sevillano, Bellotudo, Redondillo, Lechin, Nevadillo Blanco, Varal Blanco, Empeltre, Racimal, Varal Negro, Colchonudo, Ojillo de Libre, Carrasqueño, Gordal, and Verdejo, which are the early varieties, and the Madrileño, Cornicabra, Cornezuelo, Javaluno, Picudo, and Nevadillo Negro, which ripen late.

FIFTEEN EARLY VARIETIES.

Manzanillo.—This olive tree requires soil of good quality, fertilized and irrigated if the ground is dry, and under these conditions produces large crops of good-sized olives. It is largely cultivated in the maritime Provinces, and especially in Seville. It produces regularly and abundantly. The fruit is usually picked when green, so that less work will be required from the trees than if the fruit is left to ripen. The fruit weighs 7 grams, the stone 1 gram. The fruit is good for eating and is largely used for pickling.

Sevillano.—This is a small tree, which produces the finest quality of fruit (the "Queen" olive of commerce) and the largest olive produced in Spain. The fruit weighs 12 to 14 grams, the stone 1 gram.

When the fruit is ripe the pulp adheres closely to the stone and the color is blue black. It produces poor, bitter oil. The fruit is usually picked green for pickling, which results in the tree bearing with more regularity. This tree is largely grown in Andalusia, especially in Seville Province, from which it takes its name. The trees need good fertile soil and fertilizers in the dry regions. They do not resist cold well, and must not be pruned freely, as they are very sensitive to mutilation.

The tree usually bears full crops in alternate years, seldom, if ever, producing two good crops in successive years, though two poor crops in succession occasionally happen. During recent years the good crops have been produced in the years of uneven numbers.

This olive is of particular interest to the trade, as it is the fruit most called for in the United States, known under the name of "Queen." When making quotations for the United States it is usual to specify Queens, as distinguished from other olives, such as the Manzanillo, Hojiblanca, etc.

Bellotudo.—A large and luxuriant tree with intertwining branches; flowers freely but does not produce much fruit unless carefully taken care of. The fruit weighs 4.1 grams, the color of the pulp being reddish on the exterior and plum colored in the interior. The stone is large, being in proportion of 1 to 3 of the pulp. The fruit ripens early and produces good oil. It is not largely grown in Spain, but may be found in the Province of Jaen and the Torredonjimeno district. It is not popular, as it produces very short crops. The tree is said to respond to careful cultivation, especially when abundant fertilization is given.

Redondillo.—This tree is of medium size, the limbs being inclined to grow closely and confusedly if not carefully pruned, but long and open when taken care of. It is a hardy type much grown in the northern and central Provinces, as the fruit matures early and requires only 3,400 units of heat. It needs good soil and fertilization and thorough cultivation. The fruit is good for pickling and makes good oil. It generally weighs 3 grams and measures 16 by 18 millimeters in circumference; the stone weighs one-half gram and is in proportion of 1 to 5 of the pulp.

Lechin.—A tree of considerable size, bearing very small fruit. It is very hardy and resistant of cold, and is therefore particularly suitable for northern climates. It is grown in the Provinces of Cordoba and Jaen, although not abundantly. The fruit is principally used for the production of oil, which is of excellent quality. It is said that this tree will resist a temperature of 14° C. below zero and is largely cultivated in France.

Nevadillo Blanco.—A tree of fair size, much cultivated in Cadiz, Cordoba, and Jaen and in other parts of Andalusia, where it is popular because of its constant production. It requires sheltered situations, as it is easily affected by wind and frost. It has a tendency to lean over, owing to the abundance of the fruit produced. It bears fruit weighing 3.6 grams, the stone weighing 0.7 gram. The pulp adheres closely to the pit and produces exceptionally good oil in large quantities It is estimated that 15 celemines (1 celemine=0.68 peck) produces 26 pounds of oil, a much larger yield than is usually obtained from other varieties of olives. The fruit leaves the tree easily and can therefore be gathered without injuring it.

Varal Blanco.—This is a tree of large size, the fruit of which matures slowly and irregularly, making the collection uncertain and expensive. It is cultivated exclusively for its oil qualities, and is inclined to run to wood rather than to fruit. The olives weigh 3.4 grams, the stone weighing 0.6 gram. It is grown in Jaen Province and in many small pueblos. Occasionally crops are produced only once in four years, and for this reason it is considered one of the poorest trees.

Empeltre.—A small hardy tree, throwing out only a few branches, popular in the northern Provinces. It requires light, fertile soil, plenty of humidity, and mañuring, under which conditions it is a most prolific bearer. It is grown in Aragon and Navarra, along the Ebro, and in Morata, Saragossa, Logrona, and Tudela. The fruit weighs 4 grams, the seed 0.8 gram, and is excellent for oil.

Racimal.—A medium-sized tree that resists the cold well and thrives even in poor ground. The fruit weighs 3.7 grams, the stone 0.7 gram. It produces oil of fair quality, but is said to leave a large quantity of residue. The tree has "off years" when the crop is poor. The fruit matures early, probably earlier than any other variety. It is grown to a considerable extent in the Province of Jaen.

Varal Negro.—A medium-sized tree that in proper soil grows well and bears abundantly. It is an early bearing tree, but does not resist the cold well and is therefore usually planted in sheltered spots where the temperature does not go below 5° C. The fruit weighs 3.1 grams, the stone 0.9 gram, and is excellent for oil manufacture. It requires careful pruning and the bearing limbs have to be ringed. It is cultivated in Cordoba and Jaen, but only on a small scale owing to the uncertainty of its crops.

The preceding 10 varieties are those most generally found in the olive orchards of southern Spain, and with the Gordal form the bulk of the olive trees of that district. The following varieties are, however, found in Spain, and are grown in more or less quantities according to the location:

Colchonudo.—An exceptionally large tree, with numerous limbs and hanging secondary branches; is good for temperate climates which do not show more than 3,500 calories of heat. It bears every alternate year with ordinary cultivation. The fruit measures 20 millimeters in length with a diameter of 15 millimeters, weighs 3.4 grams, and has a stone weighing 0.9 gram. It is cultivated to a small extent in Jaen.

Ojillo de Libre.—A small tree with short rigid limbs that needs much cultivation in fertile soil. The fruit measures 22 millimeters with a diameter of 16 millimeters, weighs 3.3 grams, with a stone of 0.6 gram. It is a late-bearing tree, but produces fruit with an abundance of oil. This tree is cultivated somewhat in Andalusia, especially in Jaen and Cordoba, but is not generally popular because when collecting the crop the branches break easily, especially those that have the most fruit. As the olives are usually collected by being knocked from the trees, the best branches are lost. It produces good crops only once in two or three years.

Carrasqueño.—A small tree with short, inflexible limbs and branches that break easily when the fruit is removed. The fruit weighs 3.8 grams, the stone 0.6 gram, and is used for both pickling and oil. It frequently falls from the tree when worms attack it. It matures early, but when used for pickling is removed from the tree when green. This tree is cultivated in some places in Andalusia, but is seen principally in Jaen. It needs fertile land and requires much attention and fertilization. Insects which attack the olive trees seek this tree in preference to any other.

Gordal.—A tree of large size and of strong and rapid growth. It is one of the varieties largely cultivated in Spain, especially in Andalusia, though it produces well also in Madrid Province. In order to obtain the best results it requires good soil, fertilization, and much cultivation. It resists the cold well, matures early, and is a prolific, regular bearer. The fruit is similar in form to the Sevillano previously mentioned, and the former is generally known under the name of Gordal. The fruit of this variety measures 23 by 18 millimeters, its color when ripe being a brownish black. It weighs 4.2 grams, the stone 0.5 gram. It is fine for pickling, which is the general use, but also produces excellent oil. It matures early, and as it is picked before it ripens the trees produce good crops annually. This variety is grown more generally than any other and when pickled enters largely into commerce as the Queen olive. Queen olives are generally known to the trade as "Gordales," and are largely shipped to the United States.

Verdejo.—A tree of medium size with a tendency to dwarf considerably if not well cared for. The fruit weighs 3.7 grams, the stone 0.6 gram. It is used principally for preserving but also produces good oil. The trees resist the cold well and in the famous frost of 1829 were those least damaged. This variety is largely cultivated in Madrid and Cataluna districts. It needs a well-cultivated soil, and when well taken care of gradually increases its production.

SIX LATE VARIETIES.

The preceding 15 varieties are known as the early olives. The late kinds are as follows:

Madrileño.—A tree of medium size with regular limbs arching over. The fruit is large, measuring 35 by 28 millimeters, weighs 12 grams, and has a stone of 1 gram. It is a fine variety for preserving, but also produces good oil, though not in the quantity that would be expected from the size of the pulp. The tree is not prolific and requires careful cultivation and cautious pruning. It does not appear to be cultivated in the Madrid district, and the name seems, therefore, to be a misnomer. It is found mainly in the south and the maritime zone.

Cornicabra.—This is the largest olive tree known and is found all over Spain, more generally in the central Provinces. It is said to give better oil than any of the other late-maturing varieties, which generally are much inferior to the early maturing species in oil-giving qualities. The tree resists the cold well, but needs 3,978 units of heat. It produces fruit measuring 39 millimeters in length (a peculiar long-shaped olive), with a diameter of 19 millimeters, weighing 5.2 grams, with a stone of 1.2 grams.

Cornezuelo.—This is also a large-sized tree, which is distinguished from the preceding variety by its leaves, size of the fruit, and its smell. The fruit measures 28 by 15 millimeters, weighs 3.1 grams, the stone 0.6 gram, and is considered excellent for oil. It matures slowly and is one of the varieties that needs much heat to ripen the fruit. In Madrid it does not ripen until January and in some years does not ripen entirely. It produces, therefore, a smaller quantity of oil. The tree resists the cold well and is largely cultivated in the colder regions. It seems to be mostly grown in Castilla, but also in Andalusia, the Mancha, and generally throughout Spain. It requires careful cultivation and much manuring, resists dry weather well, and the newer plants produce better than the older.

Javaluno.—This is often confused with Cornicabra and Cornezuelo. It is a tree of good appearance, with long, curved branches. The fruit measures 30 by 20 millimeters, weighs 6.2 grams, and has a stone weighing 1.2 grams. It produces good oil and can also be used for pickling, though it is seldom so used. It is particularly difficult to keep this variety free from insects. It is grown in Jaen and Cataluna in cold situations. With ordinary cultivation and soil it produces annually in abundance, but if neglected will have poor crops triennially.

Picudo.—A medium-sized tree, with fruit weighing 5.2 grams, measuring 30 by 18 millimeters, and with a stone weighing 1 gram. It is considered good for pickling, as it is a "clear-stone" olive with good pulp. It also produces good oil. The fruit is late, but the tree bears well. This variety is called by various names in different districts, it being grown very generally throughout Spain. In some districts it is called the Cornezuelo; in others, the Javaluno or Cornicabra.

Nevadillo Negro.—A very luxuriant, medium-sized tree, with short and distorted limbs. The fruit, which measures 23 by 23 millimeters, weighs 4.3 grams, the stone 0.7 gram. It produces an excellent quality of oil and is largely grown in Jaen Province, where it is much prized and said to produce a larger percentage of oil than any other variety. The shoots command a better price in Jaen than any other variety and are more easily sold. It requires good soil and cultivation, but repays by giving equally good crops.

OTHER VARIETIES NOT LARGELY GROWN.

Several other varieties are known in Spain, but are not largely cultivated. The Negrillo is a tree with short, curved limbs, and small, round, black fruit closely adhering to the stone. The Loaime has medium-sized branches, large leaves, medium-sized fruit, oval and black, which ripens early; is said to be very sweet when well matured. It is found around Granada and is said to produce a large quantity of oil. The Negro is known in Andujar and is distinguished by the tenacity of the fruit to the tree, which makes it difficult to gather. The Arola, also known as the Azufairada and Hojiblanca, has branches and leaves similar to the Manzanillo, round, hard fruit, black with reddish spots, and is probably a variety of the latter species. The Verafina, a small tree, usually leaning toward the ground, resists the cold well, and ripens early. The Harbequin is another small tree, with curved limbs; it resists the cold well. The Cordovi is said to be a good fruit for pickling, equally as good as the Manzanillo. The Bermejuela, a small tree grown in Logrona district, and the Tachuna, which is cultivated in the Province of Cordoba, have small leaves and fruit which produces good oil.

Some of the trees are of enormous size and have doubtless been in existence for hundreds, if not thousands, of years. The duration of the productive period is difficult to determine, but it is known to be extremely long when not cut short by injuries to the tree or exhaustion of the soil.

CLASSIFICATION BY SPECIES.

Many of the varieties are known by different names in the various Provinces, and even in different districts of the same Province. The Latin names of the principal species are as follows:

Olea Europæa alconii.—This is known in Seville as the Cañivano Blanco. This variety produces a clear violet-colored fruit, measuring 25 millimeters in length by 17 broad. In Cordoba it is called the Alameña, is reddish in color, oval, heart-shaped at the apex and of dimensions similar to the Seville fruit.

Olea Europæa argentata.—In Cordoba this is known under the name Nevadillo Blanco, and the fruit is oval in shape and of an intense plum or violet color, measuring 29 to 18 millimeters. It is also called Albaideña in the same Province when the fruit, though oval, terminates in a point. The fruit is also of violet color and measures 27 by 18 millimeters. In Granada this is known as Negrito y Lucio, the fruit being oval and black, measuring 26 by 19 millimeters. In Jaen it is known as Nevadillo; the fruit is green with violet tones and measures 26 by 18 millimeters.

The Spanish Agronomical Board (Junta Consultiva Agronomica) states that this tree is known under the names of Hojiblanco and Zorzaleño in Alicante and Cadiz; Moradillo, Zorzaleño. and Loaime in Almeria; Gordal and Redondillo in Avila; Zorzaleño and Cordobes in Badajoz; Gordal in Caceres; Nevadillo Blanco and Negro in Ciudad Real; Hojiblanco, Nevadillo, and Albaideña in Cordoba; Zorzaleño and Loaime in Granada; Cordobes, Morenillo, Negro, and Nevada y Nevadillo in Jaen; Nevadillo, Hojiblanco, and Doncel in Malaga; Verdal and Verdaleja in Murcia; Zorzaleño in Sala manca; and Hojiblanco, Zorzaleño, and Dulzal in Seville. It is said that this tree has its branches continually bent by the abundance of fruit, which produces excellent olive oil, and moreover the fruit breaks loose from the tree with great facility.

Olea Europæa arolensis.—This is known in Granada, Alicante, Malaga, Almeria, and Seville Provinces as the Arola and in Badajoz as the Avellanilla. The fruit is green, oblong, and rounded, and measures 23 by 17 millimeters.

Olea Europæa astiguitana.—This is known in Cordoba as the Ecijano. Its olives grow in groups of three almost perpendicularly, violet colored, measuring 20 by 13 millimeters.

Olea Europæa banqueri.—Known as the Lechin in Jaen; produces black, oval-oblong fruit measuring 19 by 11 millimeters.

Olea Europæa berrucosa.—Known in Cordoba as the Escarabajuelo; has plum-colored fruit, oblong and heart-shaped at the apex, measuring 29 by 19 millimeters.

Olea Europæa campestris.—Known in Cataluna as the Vegatenco; has fruit of a clear plum color, 20 by 17 millimeters in size.

Olea Europæa carpina.—Known in Aragon as the Carpino, grows plum-colored fruit, oval, oblong, and terminating in a point, measuring 20 by 7 millimeters.

Olea Europæa castellana.—Known in Guadalajara as the Castellano; has plum-colored fruit slightly heart-shaped, measuring 23 by 16 millimeters.

Olea Europæa cavanillensis.—This is known in Madrid as the Cornicabra, the fruit of which is plum colored and heart-shaped, with curves at the apex, and measures 21 by 10 millimeters.

Olea Europæa ceraticarpa.—This is also known as the Macho, having plum-colored fruit, oblong and bent, measuring 27 by 11 millimeters. In Extremadura this is known as the Cornicabra; the fruit being an intense green, some being curved in shape, others heart-shaped, and still others oblong, and some are seen which are curved and terminate in a nipple or teat. They measure 23 by 10 millimeters. It is a late-maturing variety.

The Spanish Agronomical Board states that these trees are known as De la Tierra in Alava; Cornezuelo in Almeria, Caceres, Cuenca, Jaen, Malaga, and Teruel; Cornezuelo and Corniche in Badajoz; Cornicabra and Machote in Ciudad Real; Cornezuelo Gatuno in Cordoba; Morrut and Carraset in Lerida; Cornicabra in Madrid; and Cornezuelo in Toledo.

Olea Europæa collina.—Known in Tarragona as the Cerradenco; the fruit is a plum-colored, globular, light-weight olive, measuring 11 millimeters in diameter.

Olea Europæa cordubensis.—Known in Granada as the Cordobes; has a fruit which is green, oval, with violet-colored stains at the base, and measures 28 by 17 millimeters.

Olea Europæa fertilis.—Generally known as De la Abundancia; fruit small and similar to the cultivated wild olives in color and form, but slightly larger.

Olea Europæa foliosa.—Known in Cordoba as the Ojudo; bears olives oval in shape and of a violet color, measuring 23 by 17 millimeters.

Olea Europæa garciæ, known in Seville as the Cañinavo and in Cordoba as the Alameño; has olives black in color, measuring 29 by 20 millimeters, or slightly redish, measuring 25 by 17 millimeters.

Olea Europæa giensis.—Known in Jaen as the Javaluno; has black, oblong fruit, broad at the apex, measuring 28 by 18 millimeters.

Olea Europæa herediæ.—Known in Granada as Loaime; has fruit nearly oval, green or slightly plum colored, with dimensions of 20 by 17 millimeters.

Olea Europæa hispalensis.—Known in Seville as Verdal, because it bears olives green in color, somewhat pointed, with flowers in peduncles, measuring 19 by 17 millimeters. In Cataluna it is also known as Verdal and bears fruit measuring 23 by 16 millimeters, and in the same region a similar fruit measuring 26 by 18 millimeters is known as "aceituna de salar" or "confitar" (salt or candy olives). In Aragon this is known as the Sevillano de Caspe, bearing plum-colored fruit with a sharp-pointed apex, measuring 29 by 20 millimeters.

This species is sometimes known as the *Olea regia*, a type of tree which produces prolifically and quickly, and in the Province of Caceres is known as the Sevillana; in Badajoz as the Sevillana Real; in Albacete, Almeria, Cadiz, Cordoba, Granada, Jaen, and Seville as the Gordal; in many of the towns of Andalusia as the Ocal; in Castellon as the Ocal, Gorosal, or Gorosalete; and in Murcia as the Gordal, Molar, or Casta de Cieza.

Olea Europæa ilerdensis.—Known in Cataluna as the Arbequin; has small, semiglobular, slightly plum-colored fruit, which measures 11 millimeters in diameter.

Olea Europæa imperialis.—Known in Cordoba as the Imperial; produces olives which are round, or slightly oval, green, or slightly red in color, measuring 16 by 11 millimeters.

Olea Europæa lagascæ.—Known in Jaen as the Jabaluno; has green, cylindrical fruit terminating in a point, measuring 35 by 18 millimeters. In Coimeira this is known as the Glenensis.

Olea Europæa lentiscua.—Known in Extremadura as the Lentisco; has green, slightly oval fruit, measuring 17 by 15 millimeters.

Olea Europæa majoriscensis.—Known in Tarragona as the Mallorquin; has plum-colored fruit, heart-shaped, measuring 29 by 19 millimeters.

Olea Europæa martinensiis.—Known in Cordoba as the Ocal; has oblong, heart-shaped fruit, brown in color, measuring 29 by 19 millimeters.

Olea Europæa maxima.—Known in Seville as the Morcal; produces plum-colored fruit, 20 by 14 millimeters in size. According to the Spanish Agronomical Board, this is known in Badajoz as the Morcal, and by the same name in Granada, Huelva, Malaga, and Teruel; in Avila as the Injerta; in Cordoba as the Campanillo; and in Castellon as the Moruda or Artanenca. The fruit is especially good for pickling and produces good oil. Subvarieties of this tree are known in Cordoba as the Silvestris and Acebuche Morcal, having plum-colored fruit with reddish tints, measuring 20 by 15 millimeters.

Olea Europæa mollis.—A black olive, round or slightly oval, measuring in Seville 25 millimeters in diameter and in Granada 19 only. It is known in Granada as the Mollar and in Seville as the Mollarejo.

Olea Europæa monstruosa.—Fruit is furrowed longitudinally, rounded, and 18 millimeters in diameter.

Olea Europæa nigricans.—Can be distinguished by its brownish violet color, and appears to be inverted, having the widest part at the bottom. It measures 20 by 11 millimeters. It is an excellent oil-producing olive, grown in the north of Spain, where it is known as the Empeltre or Negral.

Olea Europæa novilis.—Has fruit intensely dark in color, measuring 24 by 19 millimeters; known in Jaen as the Castizo.

Olea Europæa oleaster.—Cultivated and known as the Acebuche in Valdemoro; has olives of intense brown measuring 13 by 9 millimeters; in Alicante the fruit is also brown, measuring 20 by 11 millimeters; in Jaen it is oblong and oval, slightly curved, and black in color, measuring 25 by 13 millimeters; in Seville the fruit is black or sometimes brown, round, measuring 10 to 12 millimeters in diameter. A subvariety is also cultivated in Seville called the *fructo albo,* because the fruit is white with gray or brown spots, measuring 15 by 9 millimeters. In Valencia this is known as the Olivastro, or wild olive with white fruit, bearing yellow-toned olives measuring 16 by 10 millimeters.

The common wild olive with brown fruit measuring 18 by 9 millimeters is of this species.

Olea Europæa ovalis.—Known in Cordoba as the Ojo de Libre, because of its oval fruit, brown in color, measuring 28 by 16 millimeters. In Seville it is called the Lechino and has green, oval fruit, 31 by 17 millimeters; and is also known as the Zorzaleño, whose fruit is distinguished by its brown color and smallness, measuring 21 by 14 millimeters. This tree is known in Cordoba, Granada, and Jaen as the Lechin, as the Lechin and Picholin in Almeria, as the Picholin and Cuquillo in Alicante, as the Piñocillo in Albacete, and as the Cuquillo, Piñocillo, and Menudas in Valencia. It is a tree of considerable size and its branches are inclined to droop, owing to the abundance of fruit. It is an excellent oil producer.

Olea Europæa ovoidea.—Has oval, green fruit measuring 29 by 18 millimeters, and is known in Extremadura as the "hueva de gallo" (rooster's egg).

Olea Europæa pasernia.—Has oblong, brown fruit 14 by 7 millimeters in size, and is known in Cordoba as the "lengua de pajaro" (bird's tongue).

Olea Europæa pendula.—Derives its name from its hanging branches; green or slightly brownish fruit is produced, measuring 20 by 13 millimeters. It is known in Cordoba as Lloron.

Olea Europæa pomiformis.—A species of Manzanillo; fruit clear brown, round or slightly oval, some being heart-shaped, measuring 23 by 16 millimeters. Other classes of Manzanillos have fruit of the same color, measuring 20 by 25 millimeters, and are known in Aragon and Tarragona as the Royal or Manzanita de Caspe. In Saragossa the fruit is said to be heart-shaped, measuring 18 by 14 millimeters. In Seville it is known under the name of Manzanilla Sevillana and is the principal olive used for stuffing with peppers or anchovies. It is very largely marketed, and when Manzanillo olives are quoted to the trade the term represents this class of olives. In Seville it measures 22 by 15 millimeters, and is often green in color. This name is also given in Seville to olives slightly larger and somewhat darker. In Madrid it is known as the Manzanilla Sevillana, and measures 25 by 16 millimeters. In Cordoba the Manzanillos Negro and Blanco are of this variety. The fruit of the first named is green, somewhat oblong, and measures 18 by 15 millimeters, that of the second named being yellow green and larger, measuring 26 by 21 millimeters.

In Cordoba another variety of this species is known as the *O. E. P. major* or *campanilla,* with clear, green fruit measuring 31 by 24 millimeters. In Extremadura another subvariety is known as the *O. E. P. minor*, or Manzanillo Gallego, with heart-shaped fruit of intense green color, measuring 17 by 11 millimeters. The Dulzal olive of Seville is another subvariety with round fruit measuring 24 millimeters in diameter, white with brownish tones, the proper name of which is *O. E. P. dultiuscula,* and the same variety is grown in Moron and Extremadura and known as the Manzanillo, with fruit of an intense green, measuring 16 by 10 millimeters. This olive is the Royal and Verdillo of Saragossa; the Vall de Gallinera and the Villalonga of Valencia. The tree has few limbs, but they are long and curved. The fruit leaves the limbs easly and ripens early with 3,400 degrees of heat.

This Manzanillo type of olive is probably more largely cultivated in southern Spain than any other. It produces good, even crops, makes good oil, and is an excellent variety for pickling.

Olea Europæa regalis.—Known as the Sevillano of Jaen; has large oblong fruit terminating in a teat, of clear color, slightly brownish, measuring 31 by 20 millimeters. This is also called the Gordal de Sevilla in Seville, but the olives are green when picked, and they then measure 31 by 22 millimeters. A subvariety is known as the *O. E. R. nonnullis, fructo maxima,* which has fruit measuring 36 by 29 millimeters.

The Spanish Agronomical Board classifies this species as the *Olivo Hispana* of Rossier and states that it is grown in Caceres, Ciudad Real, Huelva, Guadalajara, Salamanca, Madrid, and Toledo under the name of Gordal; as the Gordal and Morisca in Badajoz; as the Mollar in Avila; as the Mollar or Ocal in Cordoba; as the Mollar, Ocal, Mollareja, and Sevillana in Seville; as the Gordal in Huesca and Logrona; as the Sevillana in Jaen, Valencia, and Lerida, where it is also called the Grosal or Manzanedo; and as the Sevillanas and Tapon in Castellon.

The tree is of medium size, with vertical primary limbs and inclined seconds. The fruit weighs from 12 to 14 grams or more; it makes oil which is rather bitter, and is usually picked when green after it has received 3,400 degrees of heat.

Olea Europæa rostrata.—Known in Seville as the Picudo; has fruit which is green or slightly brownish, terminating in a point, and measuring 24 by 16 millimeters. It is known in Jaen as the Picudal, with black fruit, slightly heart-shaped, measuring 27 by 18 millimeters. In Cordoba it is the Pico de Grulla, with oval fruit, having a projecting point and measuring 26 by 16 millimeters. It is distinguished by the fact that each twig bears twin olives.

In Cordoba a subvariety is known as *O. E. R. humalis* or *carrasqueña*, differing from the former in that the fruit grows a larger point and only one olive grows on a twig. The Agronomical Board states that this is the *crasimorpha* of Gouan. It is called the Cornicabra in Avila, Albacete, Cuenca, Salamanca, and Granada; in addition to this name it is known as the Picuda, Picuda Real, Cuerno Real, and Picudo Ordinario in Badajoz; as the Picudo, Correal, Tetillo, and Javaluno in Jaen; Picudo in Caceres, Malaga, Toledo, and Murcia; Piñonero and Verafina in Teruel; De la Earga in Valencia; Picudo and Cornezuelo in Alicante; Picudo Eargas and Picuda Real in Ciudad Real; Picudillo in Logroño and Alava; Picual in Almeria; Vera in Barcelona; Picuda and Correal in Cordoba; Argudells in Gerona; Reguerdo and Acanalado in Lerida; and Eargas in Saragossa.

The tree resists the cold well; it needs 3,897 degrees of heat. The fruit is black, with red spots, produces excellent oil, and is given preference in Spain for oil crushing.

Olea Europæa rustica.—Bears olives of a brown color, heart-shaped, and measuring 23 by 15 millimeters. It is known in Extremadura as the Rabudo.

Olea Europæa sorianea.—Called in Cordoba the Nevadillo Negro; has brown fruit, oblong and heart-shaped, measuring 21 by 16 millimeters.

Olea Europæa telobisina.—Bears oval fruit terminating in a point, measuring 15 by 10 millimeters; known in Cataluna as the Olesano.

Olea Europæa vera aragoniæ.—Known as the Vera in Aragon; has brown, oval fruit terminating in a point, measuring 20 by 10 millimeters.

Olea Europæa zeraticarpa.—Bears green fruit, rounded, terminating in a point, slightly heart-shaped, measuring 31 by 17 millimeters; known in Jaen as the Cornezuelo.

AREA, PRODUCTION, AND VALUE OF ORCHARDS.

It is estimated that the area in Spain devoted to olive culture amounts to 1,481,962 hectares (3,651,886 acres). The total production of olives in 1915 was 17,728,868 metric quintals (1 metric quintal equals 220.46 pounds), 17,274,364 quintals (97 per cent) of which were used for the production of oil. The average production of olives to the hectare was 11.96 quintals. The amount of oil produced to each 100 kilos of fruit averaged 18.88 quintals. The total production of oil in the country was 3,261,079 quintals, or an average of 2.26 quintals of oil to each hectare of land under olive cultivation.

THREE LEADING PROVINCES IN PRODUCTION.

According to statistics published by the Spanish Government under date of May 1, 1916, the Province of Cordoba leads in olive culture with 235,650 hectares (1 hectare equals 2.471 acres) of land in olive culture. The average production to the hectare in 1915 was 14.55 metric quintals of fruit, and the total production of olives in the Province was 3,428,600 quintals. Of this amount 2,342,458 quintals were used in the production of olive oil, the average amount of oil produced from each 100 kilos of fruit being 18.77 kilos. The total quantity of oil produced in the Province was 627,509 quintals, or an average of 2.73 quintals to the hectare.

In the same year Seville Province, the second in importance, devoted 223,470 hectares to olive culture, producing 3,442,012 quintals of fruit, or an average of 15.40 quintals to the hectare, of which amount 3,251,092 quintals were made into oil, the average production of oil to the quintal of fruit being 16.07 kilos. The total production was 522,358 quintals of oil, an average of 2.47 quintals to the hectare.

Jaen, the Province third in rank, had 211,250 hectares of land in olive culture, 400 hectares more than in the preceeding year. The total production of fruit was 2,780,750 quintals, an average of 13.16 quintals to the hectare; 2,775,250 quintals were used for oil, the average production for each 100 kilos of fruit being 18.07 kilos of oil. The total production of oil for the Province was 501,580 quintals, an average of 2.47 quintals to the hectare.

As the total production of olives in Spain in 1915 amounted to 17,728,868 quintals, it will be seen that these three Provinces produced 54 per cent of the total crop of the country.

Another important oil-producing place is Lerida, in Cataluna, where 106,800 hectares are devoted to olives, producing 572,350 quintals of fruit, all of which is used for oil. The average production of olives per hectare is 5.36 quintals and of olive oil 0.98 quintal per hectare. The average production of oil from 100 kilos of fruit was 18.22 kilos, and the total production of oil for the Province 104,306 quintals.

PRODUCTION OF FRUIT AND OIL BY PROVINCES.

The following table shows the approximate production of olives and oil for each Province during 1915, as prepared from data compiled by the engineers of the agronomical service of each Province:

Regions and Provinces.	Area of olive orchards.	Average production of olives per hectare.	Total production of olives.	Olives used for oil.	Oil produced per 100 kilos of fruit.	Total production of oil.	Average oil production per hectare.
Central or Castilla la Nueva:	*Hectares.*[1]	*Quintals.*[2]	*Quintals.*[2]	*Quintals.*[2]	*Kilos.*[3]	*Quintals.*[2]	*Quintals.*[2]
Madrid	20,564	6.07	124,778	123,533	17.57	21,699	1.07
Toledo	40,000	10.90	436,000	432,640	18.65	80,487	2.03
Guadalajara	14,535	3.56	51,727	51,585	16.52	8,521	.59
Cuenca	14,917	3.50	52,199	51,286	16.85	8,641	.59
Total	90,016	7.38	664,704	659,044	18.14	119,348	1.34
Mancha and Extremadura:							
Ciudad Real	63,904	8.52	544,697	544,571	21.20	115,481	1.81
Albacete	14,152	19.84	280,753	274,304	21.79	59,765	4.32
Caceres	35,727	9.91	354,120	346,645	17.27	59,852	1.71
Badajoz	44,400	6.26	277,840	261,169	19.47	50,839	1.22
Total	158,183	9.21	1,457,410	1,426,689	20.04	285,937	1.85
Castilla la Vieja:							
Avila	7,552	15.33	115,740	115,226	14.90	17,167	2.28
Aragon and Rioja:							
Saragossa	16,567	16.74	277,346	266,676	22.90	61,066	3.83
Huesca	17,934	14.39	258,007	256,746	23.28	59,775	3.35
Teruel	23,090	11.66	269,310	266,600	18.99	50,638	2.21
Logrono	8,327	1.79	14,900	14,900	25.00	3,725	.45
Total	65,918	12.43	819,563	804,922	21.77	175,204	2.71

[1] Hectare=2.471 acres. [2] Quintal=220.46 pounds. [3] Kilo=2.204 pounds.

Regions and Provinces.	Area of olive orchards.	Average production of olives per hectare.	Total production of olives.	Olives used for oil.	Oil produced per 100 kilos of fruit.	Total production of oil.	Average oil production per hectare.
Leonesa:	*Hectares.*	*Quintals.*	*Quintals.*	*Quintals.*	*Kilos.*	*Quintals.*	*Quintals.*
Zamora	167	13.39	2,237	2,237	15.02	336	2.01
Salamanca	4,040	8.19	33,085	31,925	18.01	5,750	1.47
Total	4,207	8.40	35,322	34,162	17.81	6,086	1.50
Galicia and Asturias:							
Lugo	110	2.50	275	275	15.00	41	.37
Orense	105	10.16	1,066	1,066	18.80	200	1.91
Total	215	6.24	1,341	1,341	17.97	241	1.12
Navarra and Vascongadas:							
Navarra	9,414	6.39	60,155	58,955	19.35	11,408	1.24
Alava	497	2.75	1,367	1,367	17.30	236	.47
Total	9,911	6.21	61,522	60,322	19.30	11,644	1.20
Cataluna:							
Barcelona	6,450	5.27	34,010	32,340	20.19	6,530	1.06
Tarragona	71,800	9.70	696,412	696,412	17.82	124,131	1.73
Lerida	106,800	5.36	572,350	572,350	18.22	104,306	.98
Gerona	15,113	8.82	133,370	133,370	22.33	29,784	1.97
Total	200,163	7.17	1,436,142	1,434,472	18.46	264,751	1.32
Levante:							
Valencia	32,980	11.49	378,942	367,142	21.85	80,218	2.51
Alicante	18,000	26.04	468,700	448,000	15.51	69,510	4.04
Castellon	31,508	7.67	241,611	234,911	20.28	47,642	1.56
Murcia	30,950	20.09	621,900	612,033	19.25	117,808	3.87
Total	113,438	15.08	1,711,153	1,662,086	18.96	315,178	2.77
Eastern Andalusia:							
Granada	48,625	10.60	515,527	512,928	16.90	86,701	1.79
Jaen	211,250	13.16	2,780,750	2,775,250	18.07	501,580	2.47
Malaga	45,485	13.97	635,385	600,000	35.60	213,620	4.97
Almeria	2,943	13.11	38,587	37,697	21.93	8,269	2.87
Total	308,303	12.88	3,970,249	3,925,875	20.64	810,170	2.66
Western Andalusia:							
Seville	223,470	15.40	3,442,012	3,251,092	16.07	522,358	2.47
Cadiz	20,798	14.24	296,213	281,236	16.95	47,683	2.41
Cordoba	235,650	14.55	3,428,600	3,342,458	18.77	627,509	2.73
Huelva	17,887	11.97	214,200	204,279	17.92	36,605	2.14
Total	497,805	14.83	7,381,025	7,079,065	17.43	1,234,155	2.58
Balearic Islands:							
Baleares	26,200	2.82	74,009	72,160	29.38	21,198	.83
Spanish Africa:							
Melilla	51	13.49	688	....	....	....	....
Grand total	1,481,962	11.96	17,728,868	17,274,364	18.88	3,261,079	2.20

The Provinces of Valladolid, Burges, Segovia, Seria, Santander, Leon, Palencia, Coruna, Pentevedra, Oviedo, Vizcaya, and Guipuzcoa produce no olives.

It will be noted in several cases that although the number of hectares planted to olives is small as compared with the Andalusian Provinces, yet the production of olives and oil is large. Alicante, for instance, produces an average of 26.04 quintals of olives to the hectare of land under olive cultivation and an average of 4.04 quintals of oil; Murcia produced an average of 20.09 quintals of fruit and 3.87 quintals of oil to the hectare; Albacete produced an average of 19.84 quintals of fruit and 4.32 quintals of oil to the hectare; Saragossa produced an average of 16.74 quintals of fruit and 3.83 quintals of oil to the hectare; all of these showing larger averages than either

Cordoba or Seville, which are considered the great olive districts of the country.

During 1915 new plantations of olives in the different Provinces amounted to 300 additional hectares in Badajoz, 574 hectares in Navarra, 800 in Lerida, 150 in Valencia, 500 in Alicante, 400 in Jaen, and 135 in Malaga, a total increase of territory under olive culture during the year of 2,859 hectares (7,064 acres).

INVESTMENT AND RETURNS FROM ORCHARDS.

It is very difficult to secure any reliable data as to the value of olive orchards in Spain, as no statistics are available.

A well-known planter in the Seville district states that land now planted or which might be planted in olives is valued at approximately $50 to $200 per fanega (1 fanega equals approximately 1¼ acres), according to the location. As there are 789,934 fanegas of land devoted to olive culture in the Seville consular district, it may be estimated, at an average price of $50 per fanega, that the land alone is worth approximately $39,496,700.

In all Spain 2,301,447 fanegas are devoted to olive culture, giving, at an average valuation of $50 per fanega, a total valuation of $115,072,350 to the olive land in the Kingdom.

It is estimated that the cost of planting and cultivating olive trees up to the third year, including cost of "estacas" or "garrotes," water, fertilizers, etc., is approximately $1 each. Trees are planted about 60 to the fanega, and as they yield very little before the fifth year, and then only in small quantities, it is estimated that up to the time the trees become full bearing the cost is approximately $3 each, or $180 per fanega. This valuation would apply to Queen olive trees, but probably would be too high for a general valuation. Taking as a rough guide a valuation of $2 a tree and estimating 60 trees to the fanega, with 2,301,447 fanegas under cultivation in Spain, would give a total of 138,000,000 trees, valued at $376,000,000.

The 1915 crop amounted to 17,728,868 metric quintals (70,915,472 arrobas). At an average valuation of 3 pesetas per arroba, this would make the value of the crop approximately 212,746,416 pesetas (about $41,000,000). It is stated that the official figures of production are liable to be underestimated, as the farmers usually minimize their figures as much as possible.

Ordinary oil olives usually bring about 6 to 8 pesetas ($1.16 to $1.55) per 50 kilos (110 pounds).

PROPAGATING AND PLANTING.

Olive trees raised from the stone of the fruit always revert to their original form, known in Spain as the "acebuche," or wild olive. Six methods of reproduction are known in Spain, the first two hereafter mentioned being those most generally used.

REPRODUCTION FROM CUTTINGS.

Reproduction by "estacas," the most usual method, is secured by planting branches or limbs of the tree that have been cut for the purpose. "Estacas" for plantation in the nursery usually measure 45 to 50 centimeters (17.7 to 19.7 inches) in length and 6 to 7 centimeters (2.36 to 2.76 inches) in diameter in the slimmest part. They must be smooth, straight, and of new wood, clean and free from disease, without corrugations or crusts, and with the bark intact.

After the ground has been plowed to a depth of about 60 centimeters (23.62 inches), holes are dug 2 meters (6.56 feet) apart, 45 by 50 centimeters wide, and of the same depth, with the long section running north and south. The time of planting must correspond with the time of pruning of the trees, as the cut limbs lose much vitality if they are held unplanted for any length of time. If they can not be planted at once, they are preserved in sand in a dark place until it is possible to plant them.

"Estacas" are left in these nurseries for four years, until they have acquired a length of 2 to 3 meters (6.56 to 9.84 feet) and the diameter has increased by 5 or 6 centimeters in the slimmest parts. During this time they need no other attention than the removal of weeds, two or three openings of the soil with spades to loosen the earth, and possibly some irrigation. Each "estaca" is allowed to grow three shoots, the others being removed annually, leaving only those that are most vigorous and are properly spaced around the trunk.

TRANSPLANTING YOUNG TREES FROM THE NURSERY.

Transplanting is done at the end of the summer or beginning of the autumn. It is customary for two men to do the work, one holding the shoot in the center of the hole, which has been previously dug for the purpose, the other putting in the soil, taking care that the roots are well extended.

When transplanting "estacas" in Andalusia, it is customary to pile clay around them until only about 30 centimeters (about 1 foot) of the "estaca" is left exposed; this clay forms a mound having the appearance of a large ant hill, from the center of which the tree branch projects. An opening in the clay halfway up the cone is left, so that water may be supplied to the limb in exceptionally dry weather. This clay mound not only retains the moisture but also prevents the "estaca" from throwing out shoots low down.

The depth of the hole in which the "estaca" is placed varies in different climates, the depth being increased in the colder climates. Square pits 90 centimeters (about 3 feet) each way are considered the best, but oblong ones are said to be less expensive and are therefore generally used. At the bottom of the pit in which the "estaca" is to be planted a layer of well-rotted manure is usually placed, which is covered with a layer of good, rich soil 3 or 4 centimeters deep. The "estaca" is placed in the center and surrounded by surface soil well broken up and pounded in around the plant.

NUMBER OF TREES PLANTED TO THE ACRE.

When an old orchard is replanted, it is necessary only to fill the vacant spaces, but when a new orchard is planted the trees are set out according to one of the two plans used in Spain, the "marco real" or the "tresbolillo."

In the "marco real" formation the trees are planted at equal distances apart, so that four trees form a perfect square. In the "tresbolillo" form the planting is so arranged that three trees form an equilateral triangle, which is repeated throughout the orchard. The latter formation is considerably better, as it results in better distances between the trees, the trees are better distributed, cultivation can be done in three directions instead of only two, and a larger number of trees can be planted to the hectare.

The number of trees planted to the acre varies in different districts. In good, open soil trees are planted 12 to 16 meters (39.37 to 52.49 feet) apart; in dry land, or where the soil is inferior, at distances of 8 to 11 meters; in other districts they are planted at distances of 7 to 8 meters in good ground and 5 to 6 meters in that of inferior quality.

No definite rule is applicable to the distance apart at which trees are planted, but generally the proper distance is double the height of the tree when fully grown. The roots of the olive tree extend horizontally half as far again as the branches, and as the diameter of the tree's branches is approximately the same as the height, trees that are planted closer than twice the height of the tree are likely to have their roots intertwined and their growth stunted thereby. Some planters believe that trees closely planted better resist the cold and frost, but trees lacking proper ventilation are more liable to develop fungus growths and to offer a more fertile field for insects.

The topography, soil, and climate will, of course, largely influence the planting, and the number of trees per hectare will therefore vary in different districts and even in different plantations in the same district.

In the Provinces of Seville, Cordoba, Cadiz, Huelva, and Jaen there are usually 90 to 100 trees to the hectare (2.47 acres); in Alicante, 148; in Barcelona, 124; in Salamanca, 120; in Almeria, 113; in Albacete, Cuenca, and Guadalajara, 100 to 150; in Valencia, Murcia, Badajoz, and Caceres, 100; in Tarragona and Castellon, 80 to 85; in Malaga and Granada, 75; in Madrid, Toledo, and Ciudad Real, 70 to 80; and in the Balearic Islands, 60 to 70.

REPRODUCTION FROM "GARROTES."

"Garrotes" are cuttings 70 to 90 centimeters (27.56 to 35.43 inches) in length, generally secured by such pruning as will be of benefit to the tree. The holes for planting are not as deep as those made for "estacas," and two of the "garrotes" are planted together, leaning toward each other in such a position that the two cuttings and the bottom of the hole form a triangle, the apex being even with the ground. The manuring is similar to that used with "estacas," but with "garrotes" the upper part must be covered with loose soil. The sprouts are more exposed to damage by frost and by animals than is the case with "estacas," and the bearing age is reached much later, but it is said that the "garrotes" produce more vigorous and productive trees.

The strongest shoot from each "garrote" is left to grow, all others being carefully pruned away as soon as they appear. Each hole, by this method, produces two trees for transplanting. In some instances even four "garrotes" are placed in each hole, one from each corner meeting in the center.

Trees produced from "estacas" bear fruit in four or five years, but those from "garrotes" do not bear before the eighth or tenth year.

Other modes of reproduction are by "zuecas," protuberances which come on the trees from a cut or injury and from which shoots will grow; by "sierpes" or "raices," shoots from the living roots of the dead tree, or by "retoños," which are the sprouts or shoots from trees that have been cut above the neck of the root. These methods are, however, seldom followed, the principal method of propagation being by "estacas" or "garrotes," the latter process being more usual in the central Provinces and the former in the south and the extreme north.

GRAFTING ON WILD OLIVE TREES.

Another means of propagation is by grafts on the wild olive trees. By this method the young wild trees are transplanted to the orchards, and when they have acquired sufficient strength and become acclimatized, shoots from the cultivated trees are grafted on them. Grafting is also resorted to when it is desired to improve the class of fruit produced on certain trees of the same family.

Various methods are used in grafting on olive trees. One method is known as "point" grafting (pua), where the scion is cut to a point. The tree branch is cut across, then split lengthwise for 5 or 6 centimeters, the scions (which have a length of about 15 centimeters and bear four or five buds) are inserted therein, and the graft is carefully varnished to protect it from the air. Grafting is usually done in March, which produces better results than when the trees are grafted in October.

In crown grafting one-half of the scion is cut away to a point, the point being adjacent to the bark instead of in the center of the scion, and the graft is inserted in the tree trunk under the bark. This is usually done at the end of March or beginning of April when the sap is circulating well.

Other methods of grafting are sometimes used in olive culture, but they are considered more or less as experiments, and the ones described may be considered those usually followed in Andalusia.

CULTIVATION METHODS.

The principal cultivation required in olive culture is to keep the soil open, which is accomplished by plowing between the rows and loosening the soil around the trees with a hoe. During the first 8 to 10 years this cultivation takes place three times a year, during the winter and spring. The plows used make a furrow 10 inches in depth. The hoeing around the trees is done three times during the first and second years after planting, twice a year being considered sufficient after that time.

When shoots do not sprout the first year, which sometimes happens, they should be well watered, and if no sprouts are evident in the second year, the shoots are usually removed and replaced by others.

USE OF FERTILIZERS.

Manuring forms an important part of olive cultivation in Andalusia. It is performed by digging a circular ditch around the trees, placing therein well-rotted manure rich in phosphates, and covering the same with loose soil. The diameter of the circle varies with the size and age of the tree, the object being to place the manure so that it will be well absorbed by the outer roots and rootlets.

Manuring is usually done at three-year intervals, in the fall. Occasionally plaster from old walls is mixed with the stable manure, or calcined bones in moderate quantities are combined with it. Experts state that the use of manure improves the quality of the fruit and also increases the quantity of oil. One expert stated some years ago that 100 kilos of manure well rotted and placed about a tree increased its production by 2½ kilos in the first year, by 3 kilos in the second year, and by 2 kilos in the third year, a total of 7½ kilos.

The general tendency of modern cultivation in southern Spain, as well as elsewhere, is toward the transformation of the olive from a tree that produces good crops biennially to one that produces annually. This is accomplished by careful pruning, tilling of the soil, and the use of suitable fertilizers annually, for it is being realized that with fertilization only once in two or three years and pruning every two years the tree becomes accustomed to producing only in alternate years.

Fertilizing may be overdone, in which case the trees have an excess of leaves. The usual quantity of manure placed at the foot of the trees in Andalusia amounts to 12 kilos for each tree, to which is added 1½ kilos of superphosphate. If it is found that the orchard shows an excess of leaves, this formula is reduced to 8 kilos of manure, one-half a kilo of chlorid of potash, 1½ kilos of superphosphates, and 1 kilo of sulphate of lime.

COMPOSITION OF FERTILIZERS.

The formula most employed for olives of medium size planted so as to give 120 to 150 trees to the hectare (2.47 acres), on land without lime but good and compact, is as follows: Nitrate of soda, 170 kilos per hectare; superphosphates (18–20), 150 kilos; chlorate of potash, 70 kilos; sulphate of lime, 300 kilos. If the land is well manured the nitrate of soda is decreased; if strong in lime, the sulphate of lime is reduced. For land of medium richness, lacking lime, the following may be used per hectare: Ammonia sulphate, 160 kilos; superphosphates, 100 kilos; sulphate of potash, 70 kilos; sulphate of lime or old wall plaster, 1,500 kilos.

The time for fertilizing is considered of considerable importance, as the application at a wrong time may have a bad effect. The manure, bone and horn shavings, superphosphates, sulphate of potash, and chlorid should be applied in the autumn, the sulphate of ammonia in the winter, and the nitrate in April or May.

One of the modern agronomical engineers recommends the abandonment of the practice of putting this fertilizer in pits about the tree and suggests the advisability of distributing the fertilizer evenly over the surface where the tree roots are supposed to be.

There are various other formulas of mineral fertilizers in use in Spain, which vary with the quality of the land cultivated, the district in which located, the kind of crops raised, etc. Those interested in this matter are referred to the excellent book in Spanish entitled " El Olivo," a treatise on olive culture, by Señor Sabas Evill, which can be obtained for 3.25 pesetas (63 cents) from Tomas Sanz, Calle Sierpes 99, Seville, Spain, and other Spanish booksellers.

IRRIGATION OF ORCHARDS.

Irrigation is not largely resorted to in the Seville district, being confined almost exclusively to the watering of the "estacas" during the first years of their growth. It is stated, however, that in experiments that have been made wonderful results have been obtained from irrigation, but it should be carefully done and not more than four or five times per year, the water being spread about the land so as not to form in pools. Irrigation has been known to double the production, but is not considered of so much importance as proper manuring.

In the Seville district irrigation is not considered necessary in ordinary years and in places where there is an average rainfall, as the trees thrive well without it. In the central and northern Provinces of Spain it is more commonly used than in Cordoba and Seville and other parts of Andalusia. Irrigation has a tendency to impoverish the soil (by washing away the mineral constituents), for which reason it is necessary, wherever it is practiced, to supply the land with a larger quantity of manure.

In Saragossa irrigation is much practiced, as is also manuring and the employment of mineral fertilizers, but neither irrigation nor manuring are largely resorted to in the Seville district. If the orchards are properly plowed it is considered that two or three irrigations per year are sufficient. It is said to be a preventive of frost, and it is usual, therefore, in the colder districts, when by the direction of the wind or other signs a frost is expected, to copiously irrigate the land, which will often preserve the trees from injury, as the evaporation from the soil has a tendency to mitigate the effects of the sudden lowering of the temperature.

Only about 5 per cent of the land under olive culture in Spain is irrigated.

PRUNING AND RINGING.

The form of olive tree which is considered ideal, and which it is endeavored to produce in pruning, is vase shaped, because in that form it is better ventilated and can get a good sun bath daily. The olive tree produces fruit only on branches 2 years old. There are many opinions as to the best methods of pruning. Some recommend biennial pruning of all the branches, but by this method a crop is obtained only once in two years, presuming that there are no unusual weather conditions to destroy the crop. Others recommend annual pruning of the limbs that have borne fruit.

TEN RULES OBSERVED BY SEVILLE GROWERS.

For the Seville growers the following are called the "ten commandments of olive pruning":

1. Prune the olive annually, but do not prune too intensively, which is bad for the tree.
2. The olive tree will only bear fruit on branches that are 2 years old, which must be carefully taken into account. If these limbs are cut off, the fruit crop will be retarded two years.
3. The flowers of the olive will not turn to fruit unless exposed to the direct rays of the sun, for which reason the tree should be well aired and open to the sun.

4. The vertical branches bear fruit with difficulty; the horizontal and those that hang are the most fertile. Prune, therefore, the ones that go up, and preserve those that descend or are inclined downward.

5. When the trees have many limbs bearing fruit, the fruit will be small and contain little oil. For this reason keep the tree evenly pruned, so that there will not be an excess of fructifying branches.

6. Avoid, by means of the pruning, the alternation of the crops. In order to secure this result, respect the 2-year-old branches, avoiding at the same time an extraordinary production, which will weaken the tree and make it unproductive for one or two years.

7. Regulate, by means of the pruning, the condition of the trees, so that those with more fertile soil and those more vigorous may grow the larger and stronger crops.

8. Restrict the tree from growing too high, as experience shows that the higher trees have smaller and more irregular crops.

9. Avoid, as much as possible, pruning the trunk and large limbs.

10. Always clean the tree of dead branches and repair the bruises. The best unguent for bruises is composed of white clay and cow dung.

CONTROL OF CROP BY PRUNING.

Pruning is considered the most delicate operation connected with olive culture and the one on which the prosperity of the orchard depends.

Pruning is intended to remove the withered and tertiary branches that bear only weak and sterile twigs, thus making room for the development of the more healthy and vigorous ones; to eliminate superfluous primary limbs when they obstruct ventilation and light; to thin the branches of certain varieties that have a tendency to extreme luxuriancy and to the intertwining of limbs; and to eliminate very long vertical shoots, which are usually sterile, thereby favoring the formation of lateral bearing twigs.

In cutting larger limbs, the limb is sawn even with the trunk, great care being taken not to damage the edges of the bark. In order to facilitate the healing process, the exposed part of the wood is made slightly concave, using a scoop-shaped chisel for the purpose; the wound is then plastered with the unguent previously mentioned, which is applied with a brush.

The time of pruning varies with different districts. Some planters believe that if the pruning is done in the spring the ascending sap quickly heals the wounds; other prune at the end of the winter before the sap has commenced to move. It is the universal practice, however, to prune after the fruit has been collected and before budding has begun.

On some plantations the crop is equalized by pruning each tree so that part of the limbs bear annually; on other plantations trees are so pruned that one-half the number will bear one year and one-half in the following year.

RINGING OF LIMBS TO INCREASE PRODUCTION.

Ringing is resorted to, and is recommended, as a means of stimulating the fruit. A strip of bark ½ to 1½ centimeters (about ¼ to 1 inch) in width is removed from the secondary or tertiary flower-bearing branches, which prevents the descent of the sap, thus forcing it into the fruit, so that the production is larger and the fruit ripens earlier.

The operation is performed when the tree has begun to blossom, but before the flowers have entirely developed. It is said to be particularly useful when trees are inclined to bear only biennially, or in cases where trees are liable to overflower.

DISEASES AND PESTS AFFECTING THE TREES.

The principal disease that has affected trees in the Seville district is "blackness," which is attributed by some to the agency of fungus, while others hold that it is caused by insects. It is known under various names such as melera, mangla, melazo, tiñuela, tizne, accitillo, negra, negrilla, negrura, etc. Trees standing on very moist ground are liable to these diseases, although they also exist in trees standing on dry ground. Careful pruning to admit sunlight and air is a preventive and cure.

Numerous insects also affect the trees, among those known in the Seville district being the olive bug, the olive moth, the olive fly, the olive flea, two small beetles, and a small worm that eats the stone, causing the fruit to drop off before ripe. To get rid of this latter pest it is necessary to sacrifice the crop by gathering it at once, thus preventing a recurrence in the following season. This treatment is also practiced in the case of attack by the olive moth.

PICKING THE CROP.

The time of ripening varies with the locality and the species under cultivation. In the Seville district the gathering of olives for pickling begins about the middle of September and ends about the middle of October. At this time the fruit usually attains its maximum size but is still green and hard, and therefore suitable for the pickling processes. When intended for oil the fruit is left on the trees until ripe.

The degree of maturity which the fruit should reach in order to be right for pickling is just before it changes from green to the mature fruit tint, which varies with the variety from yellow to almost black.

In the Seville district the pickling of green olives is the principal industry. Pickled ripe olives are not largely prepared, as in California, where they are constantly becoming more popular.

The cheaper classes of olives and also the seconds and thirds that are not sufficiently good to enter into commerce are pickled in bulk, mixed with spices, garlic, peppers, and various other herbs, and are largely sold in all the markets, but they have never been packed for exportation.

Olives grown for olive oil are of a different class from those entering into commerce, and their preparation and sale is an entirely different business.

METHODS AND APPLIANCES USED IN GATHERING.

Gathering olives for oil is usually done by knocking the fruit from the trees with sticks, but for pickling the more careful growers remove the fruit from the trees by hand, which is more expensive and less expeditious but in the end more profitable.

Hand picking is frequently done by placing blankets on the ground, bending the limbs down, and collecting the fruit in the blankets, the fruit on the higher branches being removed by hand into baskets or aprons with large pockets. A second method consists in picking the fruit and depositing it in a special double bag which is hung on a branch of the tree. This bag is manufactured of three triangular pieces, held open at the top by wooden cross pieces, with strings from the corners attached to a hook by which it can be hung from the branch. A smaller bag at the bottom has an opening with a draw string to close it, which makes it possible to open the bag and remove the fruit to baskets.

This latter method is said to be better and more expeditious than the blanket and basket method, as with the latter it is necessary to stop work whenever the blanket is filled in order to place the fruit in the baskets, and the presence of one or two men is necessary to lift the blankets of fruit. With the bag method the draw string can be opened by a boy or girl on the ground, and the contents removed in small baskets and deposited in the larger receptacles without in any way interfering with the work of picking. Child labor can therefore be used at a time when there is usually a shortage of laboring people. Various means of picking have been tried and various inventions put forward, but the bag above described has proved the most satisfactory.

PICKLING PROCESSES.

Olives for pickling must be collected at just the right stage of their ripeness and must be pickled immediately, as they quickly deteriorate if left any length of time after picking.

Olives picked green are not edible, being harsh and bitter, but this bitterness is easily removed by saturation of the fruit with an alkaline solution. This saturation can be rapidly carried out, but constitutes the most delicate operation in the olive-pickling business.

CURING THE GREEN OLIVES.

In practice, the olives, after being cleaned of stems and such leaves as may be attached, are placed in concrete tanks (or tubs) holding approximately 400 to 1,000 kilos of fruit. The alkaline solution is prepared in large tanks and consists of a lye made of caustic soda dissolved in water until it marks 2½° to 3° Baumé, the former strength being generally used for Queens and the latter for Manzanillos. As the water is added to the soda considerable heat is developed, and the lye is therefore allowed to cool before being run on the fruit. It is usual to have two deposits, one cooling off while the other is being used.

The fruit is first placed in the vats and the lye run on, taking care that the stream does not fall entirely in one place. The lye is usually carried by pipes from the mixing tanks to the curing vats. Sometimes a layer of twigs and leaves is placed at the bottom of the curing vats to protect the fruit from injury by pressure, and after the vats are filled with fruit another layer of twigs and leaves is placed on top. A latticework of spliced cane covers the vat of olives, to keep the fruit from floating to the surface, as it should not be exposed to the air during the curing process.

When the curing has proceeded sufficiently the lye is quickly drained off and the fruit immediately covered with fresh clean water to wash out the superfluous lye. This is replaced by fresh water in about an hour and the operation repeated in four or five hours. This should thoroughly cleanse the olives of all superfluous lye.

After this washing the olives have a beautiful green tint, are sweet, perfumed, and slightly oily, but they will not keep in this condition, and must therefore be placed in a brine, made of common salt and water with a test point of 10° Baumé.

PICKLING IN BRINE.

When the curing is completed the olives are transferred from the vats and placed in hogsheads filled with brine. The hogsheads are placed where they are exposed to the sun, and the contents are left to ferment, this being an important stage of the curing process, during which the olives slowly change from deep green to the golden color that is so much prized.

The brine is prepared in large brick or concrete tanks, as a general rule so arranged that running water may be admitted from faucets at the top. It is tested by various types of salometers. The strength of the brine varies in accordance with the number of years it is proposed to keep the fruit, but a 10 per cent solution is usually used for preserving and for filling the casks. Brine in the cask weakens as the salt is taken up by the olives, and cask brine when tested usually shows 7 to 7½ degrees on the salometer.

Pickling by the process heretofore described makes the olives cured in September or October ready for the market in December or January. The olives processed early in the year have the benefit of the warm days of September and early October and ferment more quickly than those processed later when the sun gives less heat and the colder nights retard the fermentation. The fermentation may occupy from 30 days to 3 months, depending upon the weather. The actual curing process occupies from 4 to 8 hours, according to the condition of the fruit, some needing a stronger lye with shorter time and some a weaker lye with longer immersion. As a general rule, the entire curing, including rinsing in fresh water, is completed in less than 24 hours.

In country farmhouses, where olives are prepared only in small quantities, the same process as previously described is followed, except that the alkaline salts are replaced by a lye made of ashes. In practice 1 part of quicklime is combined with 20 parts of ashes and 20 parts of olives. The lime must be slaked and the resulting solution combined with the ashes in an appropriate vessel with a sufficient quantity of water. The fruit should be submerged in the solution until it has penetrated to a third of the depth of the pulp. At this point the operation should be stopped and the fruit well washed for several days, or until the water is clear, when the fruit is placed in brine and stored as before explained.

CURING PROCESS WITHOUT USE OF LYE.

By the slow process, which is not followed to any large extent at present in the Seville district, the freshly picked olives, still green, are placed in fresh water, where they remain about two weeks. The water is then drawn off and replaced by fresh water. Usually from 2 weeks to 20 days is sufficient time for this process. The olives are then placed in a brine with a strength of 9°, found in practice to be equal to 1 volume of salt to 14 of water. The strength of the brine is sometimes tested by placing a fresh egg therein. If the egg floats on the surface, the strength of the brine is correct.

Olives prepared by the slow process are ready for bottling or for consumption in about four months, and will keep sound for two years or more.

PRESERVING RIPE OLIVES.

Ripe olives can not be cured with lye, as the reaction of the solution on the fatty parts of the pulp has a destructive effect, and it is therefore necessary to prepare them by the slow process.

Black olives are treated in a different way. Being picked in November, when they are plentiful and ripe, they are placed for several days in a solution of salt and black pepper, which gradually modifies the bitterness, and are then preserved in olive oil.

Another process sometimes followed in the Seville district and other parts of Spain consists in taking the fruit when perfectly ripe and black, placing it in earthenware vessels wide in circumference, sprinkling it with salt, 25 grams to each kilo of fruit, and, if desired, flavoring it with wild marjoram. Other flavors used are thyme, fennel seed, aniseed, garlic, laurel leaves, etc. The vessels are moved daily, so that the fruit at the bottom may come to the top, and the pickling is continued for about a month, or until the salt solution, formed by the salt and the water of the fruit, has soaked into it. The fruit is then placed on hurdles and exposed to the sun daily, or put in a covered warm place, until completely dried.

Many of the packers have special receipts for preparing olives, especially those that are spiced or preserved with thyme, laurel, etc., but these are trade secrets, and as they are only used for small quantities of olives prepared for local use they do not come into consideration in treating of the olive as a commercial commodity.

COST OF CURING OLIVES.

It is estimated that the cost of curing olives amounts to about 2 pesetas per fanega, including caustic soda, salt, water, labor, etc., but not including the cost of assorting, which is usually slightly more than 1 peseta per fanega. (1 peseta=19.3 cents; 1 fanega of olives=97 pounds.)

Caustic soda is obtained from manufacturers in Santander in the north of Spain and costs 45 pesetas per 100 kilos (about $4 per 100 pounds) landed at Seville. The price has risen approximately 30 per cent since the outbreak of war.

Salt for the brine is obtained from the salt merchants of Cadiz. This salt delivered at the Seville factories cost 8.50 pesetas ($1.64) per ton in 1916. Another source of salt supply is the mines of Utrera, which are located near the town of that name, 31 kilometers (20 miles) from Seville.

GRADING, SORTING, AND PACKING.

The olives are first sorted into the three largest sizes of clean fruit, which are placed in different baskets. The remainder is passed to a second sorting table where the next three or four sizes are selected, what is left being passed to a third table, where the last sizes of clean fruit are selected. The very small olives (not shipped to the United States) and the faulty fruit are then passed on for a further sorting, or are sold outright to the buyers of this inferior class of olives.

STANDARD COMMERCIAL SIZES.

When the sorting is completed the olives are separated into the 13 general sizes if Queens or 7 sizes if Manzanillos. They are then re-examined and sorted by hand, in the same manner, into qualities, the Queens being divided into "prime," or "first quality," "seconds," and "Queen culls." In the trade with the United States only the first two qualities are known, "culls" not being shipped to the American market. Manzanillos are divided into "prime," or "first quality," and "seconds."

When properly sorted into grades and sizes they are again checked by weight, one-half kilo at a time being placed on scales and then individually counted by pairs to see that the number of olives corresponds with the size grade into which they have been placed. All olives so classified and weighed are counted and reweighed by a different woman, so that it may be certain that the olives contained in a basket are all of the quality and grade specified and of uniform size.

The baskets when filled are emptied into the classification barrels or deposits, of which there are usually 12 for Queens. These barrels are marked with the number of pairs of olives per half kilo as follows:

Deposit numbers.	Olives per kilo (2.2 pounds).	Deposit numbers.	Olives per kilo (2.2 pounds).
19 pairs	70 to 80	34 pairs	130 to 140
21½ pairs	80 to 90	36½ pairs	140 to 150
24 pairs	90 to 100	39 pairs	150 to 160
26½ pairs	100 to 110	41½ pairs	160 to 180
29 pairs	110 to 120	47½ pairs	180 to 200
31½ pairs	120 to 130	53 pairs	200 to 220

The olives remain in these deposits, covered with brine, until a sufficient quantity is contained therein to fill a "bocoy" (hogshead), when they are again weighed. The "bocoy" is then filled with brine, headed up, and taken to the warehouse, where it is stored with its bunghole up until time for shipment.

QUEEN AND MANZANILLO CLASSES.

Only two kinds of olives are generally known to the trade, and these have no direct connection with the trees from which the fruit is taken, being the Queens or Gordales (synonymous terms) and the Manzanillos.

Some olives are also packed and shipped as Entrefinas, Morons, and Hojiblancas, and an inferior grade of Verdals are also cured, known to the market as Bastas or "common grade," but these are not shipped to the United States except in small lots or under special circumstances.

Another class which is sometimes mentioned, but little known in the United States, is the Zorzaleños, but as a general rule the Queens and Manzanillos are the only classes considered and these make up the bulk of the shipments.

Queens have one special size considered entirely by itself, which runs from 60 to 70 olives to the kilo, usually quoted as "Queens prime, 60/70," or "Queens seconds, 60/70," according to quality.

The regular commercial gradings are as given in the foregoing table and run from 70/80 to 200/220, representing the number of olives to the kilo. Three general terms are used for size grading with Queens: "Large," representing olives running from 70/80 to 90/100; "medium," those between 100/110 and 130/140; and "small" those from 140/150 to 200/220. In normal years the crop produces about 20 to 25 per cent large olives, 50 to 55 per cent medium, and 20 to 25 per cent small.

Manzanillos in specially good years run 160/180 to the kilo, but this is exceptional and the finest grade does not ordinarily run lower than 180/200. The size gradings for commercial purposes are usually 200/220, 240/260, 280/300, 300/320, 340/360, and 380/400. They are divided also into three general classes, "large" being the fruit from 200 to 220, "medium" that from 240 to 260, and "small" that from 280 to 400. In normal years the Manzanillo crop is approximately 20 per cent large, 40 per cent medium, and 40 per cent small.

The term "Manzanillo" in the Seville trade represents what are known as "Manzanillo Sevillanas finas," and when quotations are made for "Manzanillos" it is understood that the "Sevillanas finas" will be shipped unless otherwise specified.

STUFFING OLIVES.

Olives for stuffing are carried to the workrooms in "bocoys," after they have been sorted to sizes. The stones are removed by an ingenious machine worked by young women.

Most of the stuffed olives contain peppers, and these really constitute the bulk of the pitted olive trade, but in recent years it has also become customary to stuff the Manzanillos with pieces of Queens, and some packers are preparing for the South American trade and for local use olives stuffed with anchovies.

For a large plant it is estimated that the cost of stuffing olives, including the cost of peppers, removing the stones of the fruit, wages of women who do the stuffing by hand, etc., is, approximately, 23 pesetas per fanega ($4.45 for 97 pounds). It depends somewhat on the cost of peppers and whether the manufacturer is working on a large or small scale.

Peppers are secured from the Valencia and Rioja districts, those from the former place being considered the best, and cost in 1916 23 pesetas per case of 50½ kilos (112 pounds), which is about 80 per cent above normal prices.

PACKING OPERATIONS.

Olives for bulk shipments are packed in hogsheads, called in Spain "bocoys," containing a net weight of 10 to 10½ fanegas (970 to 1,000 pounds) of fruit to the hogshead. This is the standard package for bulk shipments, and quotations are usually made on the basis of so many hogsheads.

Olives are also packed in barrels containing 3 fanegas (290 pounds), known as tierces or casks, or in Spain as "tercerolas." Barrels of 5 fanegas are also made, principally for the Spanish home made, and other kegs and packages contain 1 to 200 kilos. For the American trade practically the only packages used are the standard hogsheads of about 10 fanegas (970 pounds) for whole fruit and the barrels of 3 fanegas for pitted and stuffed olives.

Olives are also packed in tin cans containing one-half to 10 kilos, those of one-half kilo being packed 24 to the case and other sizes 12 to the case, with the largest sizes only 2 to the case.

Olives are packed in bottles of ¼ to 3 kilos, the most usual sizes being the ¼, ½, and 1 kilo bottles. One-half kilo bottles are packed 24 to the case, 1-kilo bottles 12 to the case, the 2 and 3 kilo bottles being packed 6 to the case.

Tins are packed in wooden cases without further wrapping. Bottles are first wrapped in thin paper, surrounded by straw covers, and packed with shavings from the cooperage plants of the packing houses or with straw.

Bottled olives are not exported to the United States in large quantities, American importers preferring to purchase in bulk and pack in bottles after arrival. Bottled olives are, however, shipped in large quantities to South America and other parts of the world.

The bottles are manufactured in Seville. The cases are of pine and are manufactured in local box factories, the wood being obtained from Sweden, Norway, or the United States, sometimes from the north of Spain. Hogsheads are made in the local cooperage factories or more commonly by the packers in their own plants.

Olives are packed in bottles by women, the fruit, all of one size, being arranged inside the bottles in rows by means of a pencil-shaped stick approximately a foot in length. When packed, the bottles are filled with brine and taken to the corking table, where a simple machine inserts the cork without direct pressure on the neck of the bottle, the excess brine being forced out as the cork enters, so that the bottle is completely full to the cork, leaving no air space. Bottles are stored for 24 hours after filling and then examined for leaks, after which a tin-foil cap is placed on them, and they are labeled, wrapped in paper, and placed in wooden cases.

The brine and the fruit packed therein is sometimes affected by "zapotera," a very contagious disease, which can be communicated from one hogshead to another by the mere transference of a small quantity of the brine on the stick used in removing bung samples. As a general rule, this disease does not develop until the second year after the fruit is cured. The causes of it do not seem to be clear, but the disease is known to every packer, and great care is taken to remove any barrels of fruit which become infected.

SALES METHODS.

As before explained, the Seville shippers do not recognize the various kinds of olives as distinctive products of particular species of trees, but classify them only as Queens, Mazanillos, Entrefinas, Zorzaleñas, Morons, Hojiblancas, Verdales, or Bastas, the first two clasifications being those in general use.

Shippers sell in graded lots. Some shippers have only three or four combinations, while others may have a dozen or more. A specimen lot containing 100 hogsheads of "Queens, prime" might be made up as follows: 2 hogsheads of sizes 70/80, 7 of 80/90, 10 of 90/100, 18 of 100/110, 18 of 110/120, 14 of 120/130, 10 of 130/140, 8 of 140/150, 6 of 150/160, 4 of 160/180, 2 of 180/200, 1 of 200/220.

BUYER'S INSPECTION.

In judging the quality of olives the buyer usually has one or more hogsheads of each class or size opened at the head. He judges the contents by looking first at the color, the ideal shade being a yellowish olive green; he then looks for blemishes, which appear as white or black spots, and then for uniformity of shape, the ideal olive among Queens being a long, heart-shaped fruit. This is followed by handling the olives to get by the sense of touch the firmness of the fruit. (The Spanish curer sometimes shows this firmness by bouncing the fruit on the head of the cask.) The fruit is then tested by tasting it for flavor, quality of the pulp, and acidity of the brine; it is cut open with a penknife, sliced lengthwise and close to the stone to see if the brine has properly penetrated to the stone.

The buyer, after testing several casks by opening the heads, will also probably test other casks from bung samples, the olives being removed from the bunghole by a wire instrument.

QUOTATIONS AND COMMISSIONS.

Prices on olives are usually made in pesetas f. o. b. Seville, and the general terms are cash against documents or confirmed credits. They are sold on the open market, usually on telegraphic offers and acceptances, either by the packers direct or through their agents in other countries, or by commission agents in Seville, who have clients abroad.

The prices are given at so many pesetas per fanega of 44 kilos (97 pounds) of fruit, free on board vessel at Seville, including the price of packages. Sales are usually arranged by telegrams, as the price varies too much and too rapidly for any extensive business to be transacted by mail.

Commission agents are allowed 2 per cent commission by the packers in some instances, and as their charges for purchasing are only 2 per cent, they often allow the purchasers the 2 per cent given them by the packers, so that they contend that the importer gains an advantage by dealing through them rather than buying direct from the packer, as he secures the advantage of their services, inspection of the goods before shipment, etc., without extra cost; and they also claim that by being on the spot they can ofttimes secure better quotations than can an importer acting only on telegraphic advices.

TRANSPORTATION COSTS.

It is estimated that the cost of transporting olives from the packing plants in Seville city to the wharf, including all expenses of cartage, wharfage dues, etc., is about 50 centimos per fanega (approximately 10 cents per 97 pounds), though this depends on whether the olives are being shipped in large or small packages and upon the distance from the wharf of the packing establishment. Of this amount, 15 to 20 centimos per fanega covers the cost of cartage, approximately 25 centimos wharfage and other dues, and 5 centimos are included for incidental charges.

A Government tax of 5 pesetas (97 cents) per 1,000 kilos is made on olives in the form of a "transport tax"; the cost of the consular invoice is 13 pesetas ($2.50) per shipment; war-risk insurance varies from 1 to 4 per cent; and regular marine insurance averages about 1 per cent of the value.

Freight rates are variable, especially at the present time, and are arranged on the arrival of the ship or just before its arrival. There has been some difficulty recently in securing shipping space, vessels preferring to leave in ballast and save the time that would be required in loading olives in Seville, in order to make a quicker return trip, thereby securing the higher rate of freight paid for goods leaving the United States and other countries for Europe.

VALUE OF EXPORTS.

The total exportation of olives from the Seville district, according to the Spanish customhouse statistics, amounted to 23,445 tons in 1914, 19,333 tons in 1915, and 32,144 tons in 1916.

As the years with large crops alternate with seasons of short crops, it is usual to take two years together and consider them as one campaign. Following are the figures of shipments of three campaigns as given by a prominent olive shipper in Seville: Shipped during 1910 and 1911, representing crops gathered in the autumns of 1909 and 1910, 20,054 hogsheads and 17,240 barrels; during 1912 and 1913, representing crops of 1911 and 1912, 28,532 hogsheads and 37,911 barrels; during 1914 and 1915, representing crops of 1913 and 1914, 32,155 hogsheads and 38,763 barrels. Barrels generally contain pitted and pepper-stuffed olives, while hogsheads contain whole fruit, mostly Queens.

The value of exports of olives from Seville to the United States, according to consular invoices, during the past seven years, were as follows: 1910, $1,519,404; 1911, $1,054,936; 1912, $2,037,350; 1913, $1,077,435; 1914, $1,765,737; 1915, $1,227,336; 1916, $2,173,036. The annual exports from Seville to Porto Rico and the Philippine Islands have averaged about $6,000 in value.

There are a number of firms exporting olives to the United States, but the trade to other parts of the world is practically controlled by two firms. It is estimated that these two firms ship about 70 per cent of the olives sent to countries other than the United States, principally to South America.

A list of the leading olive growers, packers, and exporters in the Seville consular district may be obtained from the Bureau of Foreign and Domestic Commerce or its district and cooperative offices. Refer to file No. 80246.

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DEPARTMENT OF COMMERCE

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

B. S. CUTLER, Chief

SPECIAL CONSULAR REPORTS—No. 80

FOREIGN MARKETS

FOR

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LETTER OF SUBMITTAL.

DEPARTMENT OF COMMERCE,
BUREAU OF FOREIGN AND DOMESTIC COMMERCE,
Washington, March 15, 1918.

SIR: There is submitted herewith a compilation of reports on foreign markets for cotton linters, cotton batting, and cotton waste, which were prepared by American consuls in various trading centers throughout the world and transmitted to this Bureau during 1915 and 1916. The scope of the investigation and the data thereby obtained should make this publication of more than ordinary value to American textile interests. The dearth of information available in the past with regard to this important branch of the cotton industry has doubtless handicapped its development along export lines. It is hoped that the present report will supply the preliminary data that are necessary for the expansion of the trade in the foreign field.

Statistics are unfortunately lacking for Saxony, for parts of France, and for Belgium and Poland, where large waste-manufacturing industries were located previous to the war. Wherever feasible, information was obtained with regard to related centers, such as Berlin and Hamburg, Rouen, and Moscow.

It is a cause for regret that the recent pressure of public business that called for immediate attention has prevented the previous publication of these reports; but inasmuch as the present survey applies chiefly to the normal period preceding the war, the delay, it is believed, has not appreciably affected its value to the trade.

Respectfully,

B. S. CUTLER,
Chief of Bureau.

To Hon. WILLIAM C. REDFIELD,
Secretary of Commerce.

FOREIGN MARKETS FOR COTTON LINTERS, BATTING, AND WASTE.

INTRODUCTION.

Not only is the United States the great cotton-producing nation of the globe, but it holds the position of primacy as well in the manufacture of linters and waste. The figures for batting are not given separately, but if available they would doubtless indicate that the first place in this industry also belongs to the United States. Normally the United Kingdom, the United States, and Germany are the three great textile-manufacturing nations of the world, and any discussion of the industry, in whole or in part, must take into special consideration the developments in these producing countries.

The value of a discussion of present conditions in the manufacture and utilization of cotton linters, batting, and waste would be problematical, even if its compilation were not practically impossible. Therefore the reports deal only incidentally with the conditions since the war started, but they attempt to present a detailed survey of the production and distribution of these articles before the war in the world's leading centers of industry and commerce. This survey, it is hoped, will be of service to American manufacturers and exporters as a basis for their plans to develop after-the-war markets.

AMERICAN PRODUCTION AND TRADE IN LINTERS.

The supply of cotton linters in the United States for the 12 months ended July 31, 1917, was 1,759,522 bales, averaging 500 pounds to the bale, as compared with 1,444,901 bales for the year ended July 31, 1916. Of the 1917 supply 869,702 bales were consumed at home and 436,161 bales were exported, while 453,659 bales were held in this country at the close of the year. The mill consumption of linters in the United States in 1916 (880,916 bales) was the largest recorded, surpassing that of 1917, the next largest, by 11,214 bales and that of 1915, which takes third place, by 469,071 bales.

The following table, giving the quantity, value, and average price per pound of the cotton linters produced in the United States during the 18 years ended in 1916, shows the remarkable growth of this industry both before and since the war:

Years.	Bales.	Value.	Average price per pound.	Years.	Bales.	Value.	Average price per pound.
			Cents.				*Cents.*
1899	114,544	$1,800,000	3.1	1908	330,277	$2,340,000	1.4
1900	111,096	1,890,000	3.4	1909	296,640	4,770,000	3.2
1901	145,103	1,520,000	2.1	1910	379,576	6,250,000	3.3
1902	150,366	2,030,000	2.7	1911	533,098	5,150,000	1.9
1903	194,486	4,380,000	4.5	1912	583,091	7,450,000	2.5
1904	235,586	4,610,000	3.9	1913	660,087	7,630,000	2.3
1905	219,397	4,190,000	3.8	1914	820,274	6,150,000	1.5
1906	307,518	3,350,000	2.2	1915	931,141	26,120,000	5.6
1907	256,487	2,920,000	2.3	1916	1,330,714	45,193,000	6.8

The recent high prices for linters are due to the great demand for this article in the manufacture of explosives. For this reason quantities of seed intended for planting purposes during the last two seasons were first passed through the delinting machines. The average production of linters per ton of seed treated in 1916 was 149 pounds, as compared with an average of 106 pounds in 1915, 74 pounds in 1914, 67 pounds in 1913 and 1912, and 57 pounds in 1911.

Prior to 1915 exports of linters were included in "upland and other unmanufactured cotton." The following table shows the quantity and value of the exports of cotton linters from the United States, by principal countries of origin, in the years ended June 30, 1915, 1916, and 1917:

Countries.	1915		1916		1917	
	Bales.	Value.	Bales.	Value.	Bales.	Value.
British South Africa	1,442	$18,379	1,949	$48,156	1,225	$49,316
Canada	7,744	120,497	3,476	175,341	22,771	1,422,818
France	62,177	1,024,110	215,703	7,859,938	394,614	20,306,602
Italy	37,067	636,660	5,144	128,057	10,065	406,655
Netherlands	37,759	687,555	9,654	248,707	708	37,716
Russia in Asia	....	....	5,198	86,795	3,713	67,470
Russia in Europe	....	....	8,684	344,190	3,749	217,638
Spain	5,862	104,301	263	9,035	186	9,314
Sweden	29,485	477,339	1,193	67,392	....	....
United Kingdom—England	29,686	463,722	692	11,049	36,986	1,529,023
All other	7,728	132,454	671	14,010	687	34,268
Total	218,950	3,665,017	252,627	8,992,685	474,704	24,110,815

AMERICAN PRODUCTION AND TRADE IN WASTE.

The latest available figures showing the production of cotton waste in the United States are those of the Census Bureau referring to the year 1914. In that year there were 49 establishments producing cotton waste, with a capital of $9,732,000 and products valued at $16,111,000. In 1914 there were used in the manufacture of cotton goods 53,994,930 pounds of cotton waste, valued at $3,533,165, and the cotton waste produced for sale amounted to 317,198,319 pounds, valued at $14,416,870. The cotton waste reported as sold by cotton mills exceeded that purchased by such mills by approximately 260,000,000 pounds in quantity and by $10,879,298 in value. The waste reported as the product of carpet and rag factories amounted to 2,945,561 pounds, valued at $149,559. Hosiery and knitting mills reported 12,999,218 pounds of cotton waste, valued at $628,944.

The total imports of cotton waste into the United States and exports of cotton waste from the United States during the last eight fiscal years are shown in the following table:

Years.	Imports.		Exports.	
	Pounds.	Value.	Pounds.	Value.
1910	35,740,475	$1,579,588	54,311,226	$3,129,034
1911	56,301,467	2,940,078	49,019,414	3,502,982
1912	34,437,484	1,646,211	62,157,317	3,518,255
1913	44,694,539	2,129,874	78,624,075	4,449,481
1914	26,815,142	1,293,864	67,250,583	4,566,769
1915	10,403,657	488,424	47,599,365	2,934,654
1916	28,304,368	1,309,787	47,965,887	3,871,637
1917	25,628,889	1,412,911	50,919,411	6,029,210

In 1913 nearly half of the cotton waste imported into the United States came from Germany and about 30 per cent from England, but in 1916 Germany dropped out altogether as a source of supply, and England sent 20,168,930 pounds out of a total of 28,304,368 pounds. The increasing supplies obtained from Italy, China, and Japan were noticeable, and in the following year (1916–17) the imports from Italy and the Far East continued to grow, while the share of England was reduced to less than half of the total.

Figures for the war years, however, reflect abnormal conditions. The following table, giving the quantity and value of the imports of cotton waste into the United States from the principal countries of origin during the five years ended June 30, 1914, shows the normal takings of this market and the sources upon which it drew:

IMPORTS OF WASTE OR FLOCKS, BY PRINCIPAL COUNTRIES, 1910-1914, YEARS ENDED JUNE 30.

Imports from—	1910	1911	1912	1913	1914
Europe:	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Austria-Hungary	141,362	13,788	....	11,722	33,289
Belgium	251,298	326,625	596,976	224,346	71,926
France	1,047,543	1,102,197	1,113,640	2,611,670	1,074,226
Germany	11,031,405	16,581,291	13,894,085	20,061,432	11,289,274
Italy	3,624,113	4,921,471	3,136,117	3,212,393	2,848,680
Netherlands	787,465	1,255,635	1,292,642	850,380	338,214
Portugal	231,663	26,400	21,619	....	....
Russia in Europe	....	....	....	17,579	....
Spain	1,611,224	364,579	364,054	421,841	198,344
Switzerland	....	....	....	12,647	....
United Kingdom—					
England	11,303,037	25,607,783	10,732,869	13,156,449	8,308,210
Scotland	95,199	57,309	23,568	31,520	56,540
Ireland	....	....	53,348	....	....
North America:					
Canada	1,674,028	886,496	627,582	1,162,960	1,017,937
Mexico	919,172	946,146	376,884	33,123	28,704
West Indies—					
Cuba	....	....	....	....	5,909
Santo Domingo	....	....	2,314	....	....
South America:					
Brazil	....	....	20,382	13,610	11,000
Colombia	....	....	....	5,887	24,164
Asia:					
China	12,188	3,395	....	1,200	9,041
East Indies, British—					
British India	1,309,925	1,286,210	1,178,914	1,260,265	564,070
Straits Settlem'ts	....	....	106,400	....	....
Japan	1,700,853	2,923,142	896,090	1,605,515	935,614
Total	35,740,475	56,301,467	34,437,484	44,694,539	26,815,142
RECAPITULATION.					
Europe	30,124,309	50,256,078	31,228,918	40,611,979	24,218,703
North America	2,593,200	1,832,642	1,006,780	1,196,083	1,052,550
South America	....	....	20,382	19,497	35,164
Asia	3,022,966	4,212,747	2,181,404	2,866,980	1,508,725

Imports from—	1910	1911	1912	1913	1914
Europe:					
Austria-Hungary	$5,164	$514	....	$386	$490
Belgium	9,415	14,518	$31,458	9,630	2,848
France	38,934	45,175	47,600	130,714	45,032
Germany	404,726	677,134	611,972	873,004	487,545
Italy	157,415	200,113	153,309	139,434	116,629
Netherlands	28,639	47,794	49,308	34,283	14,430
Portugal	10,715	886	1,769	....	....
Russia in Europe	....	....	....	758	....
Spain	46,736	11,337	12,976	15,653	7,421
Switzerland	....	....	....	1,053	....
United Kingdom—					
England	672,119	1,688,195	581,352	756,154	500,315
Scotland	2,331	2,566	201	487	3,544
Ireland	....	....	4,135	....	....
North America:					
Canada	50,261	36,508	22,164	43,661	45,923
Mexico	32,675	31,466	10,964	1,118	780
West Indies—					
Cuba	....	....	....	....	208
Santo Domingo	....	....	116	....	....
South America:					
Brazil	....	....	1,325	854	685
Colombia	....	....	....	235	1,933
Asia:					
China	1,318	178	....	73	657
East Indies, British—					
British India	60,420	70,957	74,723	59,335	21,841
Straits Settlem'ts	....	....	5,102	....	....
Japan	58,721	112,737	37,737	62,442	34,579
Total	1,579,588	2,940,078	1,646,211	2,120,874	1,293,864
RECAPITULATION.					
Europe	1,376,198	2,688,232	1,494,080	1,962,156	1,187,254
North America	82,936	67,974	33,244	44,779	46,915
South America	....	....	1,325	1,089	2,618
Asia	120,459	183,872	117,562	121,850	57,077

The cotton waste exported in 1916–17 amounted to 50,865,551 pounds, valued at $6,027,327. Of this total, Canada took 23,316,487 pounds, valued at $2,577,479, and England, 18,217,461 pounds, valued at $2,361,669—the combined purchases of these two countries representing over 80 per cent of the total quantity. Italy and Cuba, with 2,500,000 pounds and 2,100,000 pounds, respectively, and France, with 1,300,000 pounds, were the foreign purchasers next in order of importance. These figures, however, like those for imports in the war years, reflect the disturbances caused by the war. The pre-war markets of major importance for cotton waste were England and Germany, which together took nearly two-thirds of the total, and Canada and Belgium, which together took 70 per cent of the remainder in 1913 and nearly 50 per cent in 1914.

The following table shows the quantity and value of the exports of cotton waste from the United States to the principal countries of destination during the five years ended June 30, 1914.

EXPORTS OF COTTON WASTE, BY PRINCIPAL COUNTRIES, 1910–1914, YEARS ENDED JUNE 30.

Exports to—	1910	1911	1912	1913	1914	Exports to—	1910	1911	1912	1913	1914
Europe:	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	Europe:					
Belgium	5,303,060	3,595,981	10,957,225	11,769,069	6,500,481	Belgium	$245,145	$189,051	$521,607	$402,446	$303,821
Denmark	180,097	....	30,708	18,322	17,250	Denmark	5,403	....	1,358	440	1,840
France	931,737	1,357,731	1,069,226	1,618,311	2,086,399	France	87,503	125,574	91,619	109,853	206,964
Germany	20,549,046	14,031,732	14,756,450	17,900,757	21,011,705	Germany	818,770	772,893	765,791	1,003,260	1,328,130
Italy	300,178	618,337	434,349	1,346,719	1,881,476	Italy	25,936	63,881	30,669	114,265	147,583
Netherlands	538,402	542,307	1,566,094	2,524,265	3,675,885	Netherlands	17,586	16,827	47,244	69,075	109,890
Spain	802,221	377,654	53,616	474,888	465,654	Spain	85,618	40,400	5,498	49,166	40,177
Sweden	5,156	....	7,438	100,577	17,939	Sweden	250	....	384	2,041	1,200
Switzerland	146	....	....	....	....	Switzerland	8	....	....	....	....
United Kingdom—						United Kingdom—					
England	17,407,808	20,053,377	24,374,172	32,275,463	22,515,323	England	1,317,774	1,749,395	1,477,306	2,007,173	1,817,306
Scotland	21,174	47,042	21,822	3,649	4,721	Scotland	932	3,281	1,403	346	416
North America:						North America:					
Bermuda	777	1,802	1,074	2,318	1,702	Bermuda	62	170	97	212	155
British Honduras	7,310	14,611	14,085	13,118	16,939	British Honduras	391	787	749	733	931
Canada	6,782,034	6,522,206	6,612,579	8,517,569	7,288,231	Canada	411,683	407,512	408,664	541,292	478,956
Central America—						Central America					
Costa Rica	38,402	30,428	40,564	28,611	34,311	Costa Rica	2,192	1,919	2,571	2,054	2,466
Guatemala	21,188	19,402	11,274	24,985	25,576	Guatemala	1,252	1,252	689	1,713	1,936
Honduras	6,142	10,395	11,698	26,528	57,768	Honduras	372	639	657	1,451	3,009
Nicaragua	10,684	22,977	14,477	17,715	16,963	Nicaragua	759	1,731	1,058	1,232	980
Panama	248,054	439,897	370,547	475,631	207,792	Panama	13,878	24,976	25,273	32,871	12,177
Salvador	3,739	3,849	3,944	9,951	7,031	Salvador	250	335	343	803	667
Mexico	57,431	122,787	283,353	154,374	180,866	Mexico	3,620	7,884	16,222	10,275	11,836
Miquelon, Langley, etc.	....	200	....	216	352	Miquelon, Langley, etc.	....	18	....	19	30
Newf'l'd and Labrador	35,975	76,825	38,535	51,429	22,136	Newf'l'd and Labrador	3,004	5,570	2,112	3,370	1,642
West Indies—						West Indies—					
British						British—					
Barbados	27,478	....	251	368	278	Barbados	2,014	....	24	32	24
Jamaica		5,589	9,274	9,742	8,773	Jamaica		446	704	793	745
Trinidad and Tobago		14,636	17,787	20,563	16,584	Trinidad and Tobago		1,066	1,287	1,465	1,306
Other British		3,157	3,002	4,771	3,307	Other British		245	238	383	299
Cuba	555,970	625,187	831,050	801,674	728,151	Cuba	45,351	46,987	62,550	58,556	54,249
Danish	8,499	1,571	3,574	12,463	9,093	Danish	600	136	323	1,058	801
Dutch	659	3,290	5,386	8,896	11,225	Dutch	50	258	442	711	909
French	596	541	1,218	2,483	1,744	French	50	52	107	232	180
Haiti	5,414	10,121	9,195	12,126	10,642	Haiti	394	805	530	928	801
Santo Domingo	21,180	26,658	33,009	33,821	34,012	Santo Domingo	1,386	1,806	2,282	2,410	2,387

South America:					
Argentina	40,063	53,309	15,777	5,683	1,579
Bolivia	......	......	......	6,963	468
Brazil	53,460	130,954	33,012	33,048	18,075
Chile	6,292	5,915	6,701	27,782	52,644
Colombia	24,920	37,291	72,716	36,684	49,965
Ecuador	10,936	18,274	22,341	20,438	16,908
Guiana, British	1,510	1,486	600	2,537	2,007
Paraguay	180	......	......	......	......
Peru	2,510	1,000	5,272	28,446	454
Uruguay	......	......	9,100	2,525	8,235
Venezuela	22,295	27,891	35,268	40,883	29,884
Asia:					
China	......	......	......	......	350
East Indies—					
British—British India	......	......	......	......	10,210
Dutch	......	......	......	......	105
Japan	43,690	100	......	4,019	2,789
Russia in Asia	400	11,200	......	......	......
Turkey in Asia	......	......	3,295	......	5,299
Oceania:					
British—					
Australia and Tasmania	7,000	4,615	17,412	6,700	......
New Zealand	800	......	......	......	......
French	2,740	5,350	4,700	5,210	9,072
German	......	......	......	......	200
Philippine Islands	220,978	141,089	342,947	139,731	175,480
Africa: British Africa, South	2,895	650	1,200	2,054	6,550
Total	54,311,226	49,019,414	62,157,317	78,624,075	67,250,583
RECAPITULATION.					
Europe	46,039,025	40,624,161	53,271,100	68,082,020	58,176,833
North America	7,831,532	7,956,129	8,315,876	10,229,352	8,683,476
South America	162,166	276,120	200,787	204,989	180,219
Asia	44,090	11,300	3,295	4,019	18,753
Oceania	231,518	151,054	365,059	151,641	184,752
Africa	2,895	650	1,200	2,054	6,550

South America:					
Argentina	2,987	4,468	1,324	463	121
Bolivia	......	......	......	538	41
Brazil	4,291	9,741	2,570	2,016	1,310
Chile	538	519	507	2,123	3,741
Colombia	1,653	2,611	5,406	2,643	3,495
Ecuador	945	1,324	1,539	1,513	1,432
Guiana, British	93	75	29	131	114
Paraguay	12	......	......	......	......
Peru	156	90	334	1,631	36
Uruguay	......	......	725	190	587
Venezuela	1,683	2,297	2,584	3,302	2,660
Asia:					
China	......	......	......	......	33
East Indies—					
British — British India	......	......	......	......	1,514
Dutch	......	......	......	......	9
Japan	3,000	10	......	256	166
Russia in Asia	38	840	......	......	......
Turkey in Asia	......	......	228	......	302
Oceania:					
British—					
Australia and Tasmania	501	407	1,551	591	......
New Zealand	45	......	......	......	......
French	274	576	464	553	958
German	......	......	......	......	22
Philippine Islands	20,389	13,969	31,097	12,720	15,954
Africa: British Africa, South	196	49	90	153	395
Total	3,129,034	3,502,982	3,518,255	4,449,481	4,566,769
RECAPITULATION.					
Europe	2,604,925	2,961,302	2,942,879	3,758,065	3,957,333
North America	487,308	504,704	526,928	662,593	576,546
South America	12,358	21,125	15,018	14,550	13,537
Asia	3,038	850	228	256	2,024
Oceania	21,209	14,952	33,112	13,864	16,934
Africa	196	49	90	153	395

EUROPE.

AUSTRIA-HUNGARY.

CARLSBAD.

Consul Wallace J. Young reports that there is no consumption of batting or waste in the Carlsbad district, but that there is an inappreciable consumption of linters, received through Hamburg. No statistics are obtainable.

FIUME.

[Consul Benjamin F. Chase.]

This port is merely the route for imports and exports, as there are no manufacturers in this district and the consumption is small. There are textile mills in Dugaresa and Zagrab (Agram) in Croatia, and at Eszek and Borovan in Slavonia, and cotton is grown to a limited extent in Slavonia, but it is sent to Hungary proper for manufacture. No cotton waste is exported to the United States direct from the port of Fiume.

Imports and exports of cotton linters, batting, and waste are not shown separately in the figures supplied by the Royal Hungarian Office of Statistics at Fiume. The following table shows the imports and exports of the three classes of cotton together at the port of Fiume for 1910 to 1913:

Years and countries.	Pounds.	Value.	Years and countries.	Pounds.	Value.
IMPORTS.			EXPORTS.		
1910:			1910:		
Austria	1,655,654	$121,962	Austria	1,888,020	$139,079
Germany	163,801	12,066	Bosnia	72,531	5,343
France	550,268	40,535	Germany	106,923	7,876
England	15,432	1,137	Roumania	3,748	276
British India	18,298	1,348	Serbia	32,849	2,420
United States	134,260	9,890	Bulgaria	7,496	552
	2,537,713	186,938		2,111,567	155,546
1911:			1911:		
Austria	3,554,918	314,244	Austria	2,027,571	179,231
Germany	1,026,021	90,697	Bosnia	46,958	4,151
France	232,144	20,521	Germany	66,358	5,866
Italy	661	58	Belgium	441	39
Belgium	20,502	1,812	Roumania	18,078	1,598
England	51,808	4,580	Serbia	117,506	10,387
British India	105,380	9,315	Bulgaria	2,205	195
United States	54,454	4,814	European Turkey	1,102	97
	5,045,888	446,041		2,280,218	201,564

Years and countries.	Pounds.	Value.	Years and countries.	Pounds.	Value.
IMPORTS—continued.			EXPORTS—continued.		
1912:			1912:		
Austria	3,265,454	$300,684	Austria	2,602,089	$239,601
Germany	1,526,465	140,557	Bosnia	14,771	1,360
France	24,030	2,213	Germany	51,808	4,770
Belgium	661	61	Belgium	5,732	527
England	4,189	385	Roumania	14,550	1,340
Russia	441	41	Serbia	132,937	12,241
United States	101,632	9,358	Bulgaria	220	20
	4,922,872	453,299		2,822,107	259,859
1913:			1913:		
Austria	3,230,841	267,747	Austria	2,945,125	244,069
Germany	734,132	60,839	Bosnia	40,124	3,326
Switzerland	24,030	1,992	Germany	118,607	9,829
France	3,307	274	Italy	220	18
Belgium	3,748	311	England	13,669	1,133
England	83,775	6,943	Roumania	4,409	366
British India	35,494	2,941	Serbia	117,285	9,720
United States	44,533	3,691	Bulgaria	2,646	219
	4,159,860	344,738		3,242,085	268,679

REICHENBERG.

[Consul Nicholas B. Snyder.]

Under normal conditions there is a great demand for cotton, cotton linters, and cotton waste in this district. Owing to disturbed trade conditions at present, however, no cotton, cotton linters, or cotton waste is being imported; and as the dealers have only a very small amount on hand, none is being offered. Consequently there is no fixed market price at present. The manufacturers depend entirely on waste from the local spinning mills.

Cotton linters are used in the manufacture of coarse yarns, cotton hosiery, and cheap grades of textiles. Cotton batting is used by tailors and in the manufacture of quilts, and the finest grades are used for dressing wounds. Soft waste is used for cotton blanket filling and in the manufacture of explosives, yarns, and carpet. Hard waste is mixed with linters, cotton batting, and soft waste in the manufacture of coarse, cheap grades of cloth.

No cotton linters and very little or no cotton batting are exported from the district. Large quantities of waste, especially hard waste, are exported by the fine weaving and spinning mills. In the manufacture the material is first passed through a willow machine, then through a carding machine, after which it is spun. The bulk of the goods manufactured is low-grade cotton hoisery, sheeting, and prints. Common bleached sheeting is marketed in rolls of 25 to 50 yards in length and 27 to 79 inches in width. Samples of cotton waste are not obtainable at present.

Linters are packed in bales weighing 220.50 to 450 pounds. English waste is packed in somewhat larger bales, while the German, Swiss, and Italian waste is packed in sacks varying in weight from 66 to 450 pounds. Cotton batting such as tailors use is sold in sheets or rolls packed in bales weighing 110 pounds.

There are no wholesale firms in the American sense of the term. Manufacturers buy from the large importing houses in Hamburg, Bremen, and London or through agents established here.

The terms of credit are 90 days net or 2 per cent discount for cash.

DENMARK.

[Consul E. D. Winslow, Copenhagen.]

There are only about 70,000 to 80,000 spindles in the kingdom of Denmark and the yearly consumption of raw cotton has never been in excess of 40,000 bales, if indeed it has reached that amount. The exports of waste, which are small, are confined mainly to the lower qualities, such as "sweepings," "oily waste," etc., and sold mainly to Germany. Possibly some fly, strips, etc., may be exported, but the spinners sell all the soft clean waste produced to the home manipulators. Some soft waste, both clean and greasy, is sold to the wool and worsted spinners.

Hard waste is used mainly for cleaning purposes on the railways and in machine shops, etc. Some spinners a few years ago put in breaking-up machines, but they now use all the hard waste produced and bought last year about 50,000 pounds. This broken-up waste is spun into coarse material for welt (filling). Some of it also is sold to the wool and worsted spinners.

In 1914 a leading spinner sold from his mill the following quantities of different kinds of waste: Strips, 110,000 pounds; scutcher droppings, 33,000 pounds; fly, 7,000 pounds; hard waste (from doublers), 17,000 pounds; sweepings, A, 28,000 pounds; sweepings, B, 18,000 pounds; sweepings, C, 18,000 pounds.

The imports of linters are estimated at a few hundred bales annually, which used to come from Germany, but since the beginning of the European war have come from the United States. They are generally packed in bales of 500 pounds.

Cotton batting is manufactured in Denmark from imported raw material. It is doubtful whether imports of batting can compete with the home manufactured article, as there is an import duty of 45 ore per kilo (5.47 cents per pound).[a]

Though the imports of soft waste are very small, the quantity of hard waste imported is considerable and is estimated at 11,000,000 pounds annually. Before the war most of this came from Germany, but the war will, no doubt, change this situation in favor of the United States. Copenhagen with its free port, the only one in Scandinavia, will be a stable distributing point for this commodity in transit to Scandinavian and Russian ports.

Batting is used by the tailors, by the manufacturers of bedding, etc., and for medical purposes. Soft waste is used in the manufacture of the lower qualities of wadding. Hard waste is used mainly for cleaning purposes.

FRANCE.

BORDEAUX.

[Consul George A. Bucklin.]

Cotton linters are not used in this district but are imported here for shipment to other parts of France. In the northern Provinces principally, in normal times, they are used in the manufacture of absorbent cotton. There was very little direct importation from cotton-producing countries and supplies came chiefly from German dealers in times of peace. Purchases are now made in Great Britain. One of the principal manufacturers states that linters of American origin used at his factory are delivered at Marseille completely ginned.

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[a] The rates of duty given throughout this publication represent the latest information on file in the Bureau of Foreign and Domestic Commerce. The rates given in the original reports were changed where those rates have been superseded since the reports were written.

The principal wholesale buyers of cotton batting in this district are the chemical-product factories. By them it is distributed to chemists and drug stores, the principal retailers to the public. The trade in this commodity in normal times is not extensive, however. Two categories are known here, American and Indian, the former comprising short-fiber qualities and the latter long-fiber qualities. Three qualities are current, graded as quality 0, quality 1, and quality 2.

It is reported that there is a shortage of cotton waste at the present time. One of the principal uses here is for machine wiping, and this demand has increased owing to the increased shipping at this port. At the same time the supply is considerably curtailed, partly because the cotton industry of France is centered in the Vosges and northern districts, where production is now at a standstill on account of the war. Rouen is the only district of France that can supply any quantity of cotton waste at present. Besides this, German supplies are of course suspended. Great Britain is meeting French wants to a great extent, however.

During the five years beginning with 1910 the imports of cotton linters at Bordeaux were as follows: 1910, from Great Britain and Senegal, 84 short tons; 1911, from Great Britain, Germany, and Haiti, 114 tons; 1912, from the United States (52 tons), Great Britain, Germany, and Haiti, a total of 225 tons; 1913, from the same four countries (United States, 88 tons), a total of 343 tons; 1911, from Great Britain, Germany, and Haiti, 296 tons. Imports of cotton batting amounted to 218 tons in 1914, of which 202 tons were received from the United States.

Exports through Bordeaux of linters and waste amounted to 32, 62, and 66 short tons in 1911, 1912, and 1913, respectively, but rose to 414 tons in 1914, 95 tons of this total being shipped to Great Britain. The average value was $29 per ton. The exports of cotton batting were almost negligible, not exceeding 11 tons for any year, with an average value of $48 per ton.

GRENOBLE.

[Consul Thomas D. Davis.]

Though it would seem that the amount of batting and waste consumed in this district is important, no statistics showing the imports are available. There are no exports, the home production, which is small, being insufficient to supply the local demand. The use of linters is unknown in this region.

The city of Vienne, which consumes practically all the batting and waste received by this district, utilizes it in the manufacture of woolen fabrics of various kinds. Formerly the supplies came from Germany, northern France, and Belgium, a great part being produced by the French spinners of the Vosges region. The qualities received from these sources were what are known to the trade as cotons barbes and cotons doux, grades of hard and soft waste, respectively. A small quantity of American waste, in bales, was received through a German firm. Nothing can be learned of the relative quantities received from various sources.

HAVRE.

[Consul John Ball Osborne.]

Previous to the war no linters, batting, or waste was used in Havre or this consular district. Such merchandise, although sold to houses in Havre, merely passed through this port in transit to the mills of the north and east of France. Official statistics of these imports are not available, but in the trade it is said that 50,000 bales per annum is the usual quantity of linters entered at this port. Since the beginning of the war this figure is estimated at 150,000 bales.

There exists only a wholesale market for linters, batting, and waste in Havre. Terms of credit are drafts at 90 days' sight, drawn on shipment and accompanied by invoice and bill of lading. Bales weigh 220 kilos (485 pounds).

LYON.

[Consul J. E. Jones.]

Before the outbreak of the war the trade in cotton linters, batting, and waste in France was in the hands of several German firms who had succeeded in establishing a practical monopoly of the business. It is claimed that even the English firms had ceased to deal direct with France and had allowed this trade to pass into the hands of German intermediaries. Local consumers of these materials were therefore compelled to look almost entirely to the German firms for their stocks.

All purchases are based on appraisements made of type samples (standards) at Liverpool, London, or (before the war) Hamburg. The expense of appraisement, about 125 francs per 220 pounds, is shared equally by seller and buyer. Cotton waste is packed in bales of 220 kilos (485 pounds).

There is a wide range in price quotations of cotton waste, depending upon the quality, demand, season, etc. The cotton prices usually control the prices of cotton waste as well as of batting and linters. The longest terms of sale are 90 days without discount, the most common being 30 days, with a discount of 2 per cent for cash and an advance payment of 1 per cent.

Unbleached batting is subject to a duty of 22.50 francs per 100 kilos ($1.97 per 100 pounds) when imported from the United States. On account of the high duty very little of this product and only the cheapest grade is imported from foreign countries.

The exports of cotton waste from France to the United States are known as "bouffin de tissage," a by-product from the cotton mills used for polishing, machine wiping, and packing. This probably corresponds to what is called hard or thread waste in the United States. It is divided into the following classes: "Fils gras," "mi-gras," "separe," and "fil propre." The quantity of exports of cotton waste and batting from this consular district is not known either by the trade or the chamber of commerce, no statistics being kept.

The table following shows the imports and exports of cotton batting and yarn waste into the whole of France during the last five years. Some waste is included in the French statistics of imports of raw cotton, but the figures can not be separated, and therefore only the above items are given here:

Classes of goods.	1911	1912	1913	1914	1915
IMPORTS.					
Cotton in sheets, carded and gummed wadding ....metric tons..	485.9	363	488.9	951	[a]3,914.4
	$252,251	$172,349	$250,900	$482,693	$1,986,935
Waste of cotton yarn................do....	1,543.4	2,427.3	1,122.9	408.5	578.1
	$119,081	$177,946	$86,657	$31,459	$44,583
EXPORTS.					
Cotton in sheets, carded and gummed wadding........................metric tons..	441.9	514.8	535.2	293	226.2
	$244,724	$262,287	$293,360	$165,208	$127,573
Waste of cotton yarn................do....	1,140.9	1,128.5	1,464.4	794.3	798.3
	$88,008	$82,797	$107,308	$58,286	$71,796

[a] Not including 134.4 metric tons imported for the use of the Army.

The largest consumers of cotton waste and batting are the quilt and blanket manufacturers centered at Cours, Amplepuis, and Serezin in the Department of the Rhone, Vienne (Isere), and Mazamet (Tarn). Vienne uses chiefly the higher grades of waste for manufacturing hangings and carpets. Cours, the seat of the blanket industry, takes rather the lower grades of cotton waste, "gras," and "mi-gras," of which it consumes 20,000 or 30,000 kilos (44,000 to 66,000 pounds) annually.

Linters are consumed chiefly by the powder mills at St. Chamont and Angouleme.

According to information furnished to this consulate, practically all the direct importers of these goods are located at Havre, Rouen, Bordeaux, Marseille, and Paris. The most important manufacturers and sellers of cotton waste are found in the east and north of France and at Rouen. The local manufacturers of waste sell chiefly to local buyers, who generally sell their stocks within the country.

While no specific information is obtainable on the subject, this consulate is informed that the methods of manufacture used are practically the same as those in the United States. Various makes of machines are employed, most of them being of English, Belgian, or German manufacture. Some are obtained in the north of France.

NANTES.

[Consul Clarence Carrigan.]

Some 50 years ago, cotton spinning and weaving were a large industry in the Nantes district, and there were a number of factories in this part of France. Later the rapid development of this industry in the northern Departments caused an exodus of labor from this district, and the local industry was reduced to practically nothing. The last big concern went out of business about 15 years ago.

The present cotton industry of the Nantes district is limited to the Departments of Vendee and Maine-et-Loire. Raw cotton is not used by these factories, which are engaged in weaving various articles from cotton thread. The thread, which is obtained from Great Britain and also from the northern Provinces of France, especially the Department of Seine-Inferieure, is principally No. 20 (French numbering), but the various threads from 4 to 28 (French numbering) are also largely used in the making of sheets, handkerchiefs, etc.

The factories use principally British and Swiss machinery, the Wilson and Ruty machines predominating. There are also a few Dietrich and Bourgoin machines, which are of French make.

Exports of cotton goods from this district during 1912 were computed at 33,600 kilos (74,075 pounds) and during 1913 at 23,200 kilos (51,147 pounds).

Although factories and machine shops are numerous in this region, there is such a scarcity of cotton waste that none is used for cleaning, polishing, packing, etc. Rags are used almost exclusively for these purposes, but it is interesting to note that some of the local factories use cloths or cotton dusters. These are supplied free every week by certain concerns. The cloths, after use, are returned each week to the house that provides them, and payment is made for any that may have been lost or destroyed. The supplying concern subjects the soiled cloths to a process by which the oil and grease are extracted. It appears that a fair profit is realized from the sale of this oil and grease.

There are said to be no cotton linters handled in this district at present.

Cotton batting is imported by one concern, which does a large business in unmanufactured cotton. The batting is received in bales, which vary in weight from 5 to 20 kilos (11 to 44 pounds), and is used for quilts and bedding.

The firm referred to imports also considerable quantities of unsterilized cotton for the preparation of "hydrophile" cotton used in medicine and surgery. This cotton is received in bales weighing 25 to 45 kilos (55 to 100 pounds).

NICE.

[Consul William Dulany Hunter.]

In the consular district of Nice no cotton linters, batting, or waste is imported, either directly or indirectly, and none is exported from here. The use of cotton linters is unknown, and only one of the merchants interviewed knew what the article is.

Soft cotton waste is not obtainable here, as there are no plants manufacturing any products in which it is used. There is, however, a limited demand for hard cotton waste, chiefly by foreign automobile and yacht owners for cleaning machinery. It is obtainable from only two firms in this city. The total annual sale in the Maritime Alps is estimated at 10 bales of 250 pounds each.

The cotton batting used in this consular district is specially employed for filtering olive oil. Although it is stated that large quantities are used here, it is not obtainable at wholesale, as the olive-oil refiners receive it direct from the cotton mills in northern France and in the Department of the Gard.

ROUEN.

[Consul Albro L. Burnell.]

Rouen is in one of the three important centers of the cotton industry in France. At present it is the only active one; the others, which are in the northern and eastern parts of the country, are greatly hampered by military operations. Cotton spinning and weaving in the Rouen district, which were undergoing a crisis before the war, are being carried on extensively. Mills that had shut down have reopened, and all are running on full time.

The district has 70 spinning mills, with 1,400,000 spindles, normally employing 14,000 hands and having a production valued at $24,125,000; 60 weaving mills, with 24,000 looms, normally employing 24,000 hands and having a production valued at $11,580,000; and 9 print-goods plants, normally employing 2,500 hands and having a production valued at $8,685,000. Cotton is imported by the port of Havre for this region in a roughly estimated quantity of 20,000 bales per month.

In the arrondissement of Rouen alone there are 1,100,000 spindles and 13,200 looms.

Rouen is probably the chief center of the cotton-waste trade in France. Its position in this respect is attributable to the surrounding cotton industry, already described, to its location with respect to the cotton spinning and weaving districts of northern and eastern France and England, and to the importation and exportation of certain grades of cotton waste through Havre and this port. In normal times the region in and about the cities of Lille and Roubaix is said to be next in importance.

Local dealers import soft waste principally from England and, to some extent, from the United States, and they export hard waste to those countries. As the accompanying figures indicate, the trade is very largely with England. The greater number of weaving mills than spinning mills in France and the reverse situation in England account for the exportation of hard waste and the importation of soft waste.

Local importers sell their soft waste to spinners of coarse counts. It is said that English spinners generally manufacture finer counts (Nos. 20, 30, and 40). French spinners buying soft waste manufacture coarse counts such as Nos. 8, 10, 12, and 16.

The following grades of soft waste are used in this country:

Strips.
Laps (mixed with wool in the manufacture of cheap cloth or for making woolen and cotton flannel). Many manufacturers in the Elbeuf woolen center use this grade. Some goods contain as much as 70 per cent of this waste and only 30 per cent of wool.
Rovings (also used as laps). Both grades are employed also in the manufacture of hosiery.
Combings (used with wool and then dyed).
Fly (duvets).
Blowings (batteurs).
Stockings.
Clearers.
Carriage fly.

The last five grades are used in the manufacture of blankets; they are sold by local dealers to manufacturers in the valley of the Rhone at Cours, Thizy, and Amblepuis. It is said that these manufacturers also buy stock from England. In and about Rouen the only grades used are "strips," "laps," "rovings," and to some extent "combings." In the Rouen and Elbeuf districts together about 150 metric tons of these materials are consumed monthly. In normal times the many spinning mills and mills for the manufacture of blankets in and about Roubaix and Tourcoing (not in this consular district) are large consumers of soft cotton waste. Two such mills at Tourcoing may use 80 metric tons and 200 to 300 metric tons, respectively, per month.

Local dealers purchase hard waste not only from weaving mills in this region but also from other parts of France. The grades are numerous, but the following are the most common: White cop waste (bouts fins blancs); colored winders (bouts fins couleur); white thrums (encollés blancs); colored thrums (encollés coulers); loom sweep (balayures de tissage). Colored hard waste is used here exclusively for cleaning engines, machinery, etc. White hard waste, especially white cop waste, is torn up and respun.

Cotton waste is purchased by local dealers from mills in this region for cash. They buy from English mills or dealers at 30 days without discount, and they sell under the same conditions on corresponding terms. Sales are made to the United States, generally, for 80 or 90 per cent of the invoiced value in cash against documents (consular invoice, commercial invoice, and bill of lading) paid by Paris or London banking houses, and the balance is paid by check on receipt of shipments by the purchasers.

There is practically no trade in and no production of linters in the district. Some linters may be supplied by this market for the manufacture of gunpowder. Batting is manufactured in large sheets by two mills for making quilts.

No statistics are available to show separately the imports and exports at the port of Rouen, of cotton linters, cotton batting, and cotton waste. Of these products, however, little else is imported but soft waste, and little exported but hard waste. The imports of these products into Rouen from 1910 to 1914, and the amounts received from the principal countries of origin were as follows: 1910—1,424 metric tons, of which 1,366 tons came from the United Kingdom, 56 tons from Belgium, and 2 tons from Germany; 1911—2,094 tons, of which 2,081 tons came from the United Kingdom, 7 tons from Germany, and 6 tons from Switzerland; 1912—2,256 tons, of which 2,183 tons came from the United Kingdom, 33 tons from Germany, 13 tons from the Netherlands, 11 tons each from Portugal and Spain, and 5 tons from Belgium; 1913—1,502 tons, of which 1,422 tons came from the United Kingdom, 42 tons from Germany, 15 tons from Spain, 12 tons from the Netherlands, and 11 tons from Belgium; 1914—1,100 tons, of which 959 tons came from the United Kingdom, 48 tons from Turkey, 29 tons from Germany, 26 tons from India, 19 tons from Spain, 12 tons from Belgium, and 7 tons from Algeria. These figures, however, do not represent the total trade of this part of France, a large part of which is carried on through the ports of Havre and Bordeaux.

The average value per quintal (220.46 pounds) of imports, as estimated by customs experts, was $28.564 for 1910, $26.827 for 1911, $28.564 for 1912, and $31.073 for 1913.

Following is a table of exports of cotton waste from Rouen, in tric tons, from 1910 to 1914, by principal countries of destination.

These figures are to be accepted with the same qualifications as those of imports.

Countries of destination.	1910	1911	1912	1913	1914
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Austria-Hungary	12	....	12	....	....
Belgium	2	21	118	71	....
Germany	133	37	9	16	62
Great Britain	1,697	1,576	1,673	1,389	815
Netherlands	....	68	57	245	311
Norway	123	171	148	176	106
Portugal	....	....	....	....	5
Spain	....	4	38	66	79
Sweden	141	170	189	153	121
Tunis	....	....	....	19	66
Total	2,108	2,047	2,244	2,135	1,565

The average value per quintal (220.46 pounds) of exports, as estimated by customs experts, was $39.372 for 1910, $35.319 for 1911, $36.67 for 1912, and $36.67 for 1913.

Though no exports of cotton waste to the United States are shown in the foregoing table, shipments were invoiced from this consular district, which perhaps went through the United Kingdom. The exports to the United States shown by the consular invoices were as follows: 1910, $24,019; 1911, $42,052; 1912, $69,580; 1913, $65,650; 1914, $26,049.

OTHER FRENCH CITIES.

Calais, La Rochelle, Marseille, and St. Etienne consume such inappreciable quantities of cotton linters, batting, and waste, according to the reports of the American consuls resident in the several districts, that no separate classifications are obtainable. Of course, here as elsewhere, varying quantities of waste are used in cleaning machinery, but the trade is handled through the larger centers, and in so far as American trade is concerned they can best be treated through the cities already mentioned.

GERMANY.

AIX-LA-CHAPELLE.

[Consul Henry C. A. Damm.]

The consulate is informed that cotton linters are not used by the cotton manufacturers in Munchen-Gladbach, though this is one of the chief centers of the cotton industries in Germany. Neither is cotton batting manufactured there.

Munchen-Gladbach's specialty is the production of the coarser grades of cotton yarns and the weaving of cotton blankets, cloths, and trousering. No doubt most of the soft and hard cotton waste is used for these goods. That which can not be worked up in this manner is used as paper stock or for the manufacture of explosives. A factory producing explosives is located at Duren, in this consular district.

There are no available statistics showing the imports or exports of cotton linters, cotton batting, and waste for the Aix-la-Chapelle district.

BERLIN.

[Consul General Julius G. Lay.]

Cotton linters, batting, and waste are used for innumerable purposes in Germany. Besides the common uses, they have helped to build up other German industries, such as the chemical, paper, and textile branches. In the textile industry waste is used principally in the manufacture of cotton blankets and carpet yarns and for packing and filling of various descriptions. In chemical factories it is used for filtering material and the manufacture of high explosives. In other countries hard waste is largely used for machine packing, wiping, and polishing. In Germany it is also considered a product for further manufacture.

A thorough study of the uses of waste and batting has been made by the industrial experts of the principal technical high schools, such as the Technische Hochschule at Charlottenburg. As a result of these investigations, new uses are gradually being discovered.

There are no prominent importers of linters and waste in Berlin. There are some manufacturers of waste and batting, but these are small and insignificant. They buy their raw products from dealers located at Hamburg, Bremen, and various other importing centers. Many of the large German importers of linters and waste have branch offices at the principal German seaports, as well as at the principal exporting centers in the United States and India. A carefully organized business like this can buy cheaply, transport at minimum figures, and dispose of its purchases to advantage to the various small manufacturers of cotton-waste goods.

More than 90 per cent of the raw material utilized by the cotton-waste manufacturing industry is imported from the United States. The major portion of the manufactured product is consumed locally. Small exports are made to European countries. Thus far the reexportation of manufactures of cotton waste to the United States has occurred only to a limited extent, but if this field is not properly safeguarded by manufacturers of such materials in the United States reexportation from Germany may be expected to develop.

The following statistics, compiled by Consul Harry G. Seltzer, of Breslau, show Germany's foreign trade in cotton linters, sanitary and other wadding, and hard waste from 1909 to 1913:

Products and countries.	1909	1910	1911	1912	1913
LINTERS.					
Imports:	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
United States	38,165,321	31,117,140	37,984,542	59,511,352	73,482,930
British East Indies	16,350,141	16,833,175	16,978,458	13,916,679	13,633,605
China	1,653,688	1,659,641	2,467,855	900,368	1,303,152
Egypt	2,985,720	2,737,921	3,056.710	2,388,708	4,320,617
Japan		156,970			
Other countries	4,232.215	984,806	2,475,351	1,354,079	2,431,478
Total	63,387,085	53.489,653	62,962,916	78,071,186	95,171,782
Total value	$2,737,238	$3,118.276	$3,398,640	$3,792,768	$4,623,424
Exports:					
Austria-Hungary	3,616,462	3,439,431	2,815,964	4,440,771	3,992,792
Belgium	1,883,188	1,797,429	1,634,066	2,110,485	1,795,496
France	809,096				
Italy	781,980	755,524	571,658	1,077,619	1,411,619
Netherlands		524,039	903,675	715,179	854,953
Other countries	1,720,488	1,769,650	1,528,465	1,240,321	1,321,230
Total	8,811,214	8,286,073	7,453,828	9,584,375	9,286,089
Total value	$529,788	$574,294	$484,568	$628,558	$669,494

Products and countries.	1909	1910	1911	1912	1913
SANITARY WADDING.					
Imports:	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Belgium	3,307	2,866	3,307	2,425	2,646
France	....	....	2,205	2,866	3,748
Other countries	4,189	5,291	3,968	4,189	10,582
Total	7,496	8,157	9,480	9,480	16,976
Total value	$1,190	$1,428	$1,666	$1,428	$2,856
Exports:					
Argentina	307,104	265,437	308,206	293,876	330,251
Belgium	239,422	242,509	251,327	364,424	355,605
France	....	171,079	274,696	221,344	352,077
Great Britain	238,321	312,395	533,739	676,819	518,525
Netherlands	....	....	106,262	218,699	223,768
Russia	770,956	882,951	970,034	1,140,231	1,010,376
Other countries	910,729	792,120	966,286	1,000,287	1,068,651
Total	2,466,532	2,666,491	3,410,550	3,915,630	3,879,253
Total value	$441,966	$500,752	$644,266	$693,056	$695,198
WADDING FOR INDUSTRIAL PURPOSES.					
Imports:					
Austria-Hungary	22,267	25,133	29,321	67,903	87,308
Netherlands	18,519	26,455	16,314	....	....
Switzerland	....	....	18,519	58,863	61,950
Other countries	39,022	36,817	7,937	20,723	32,408
Total	79,808	88,405	72,091	147,489	181,661
Total value	$14,280	$14,280	$10,234	$15,946	$19,516
Exports:					
Great Britain	....	....	249,784	292,774	238,099
Netherlands	262,350	328,710	443,350	301,813	313,718
Russia	110,672	182,102	217,375	....	....
Other countries	759,933	970,254	850,543	896,620	1,020,299
Total	1,132,955	1,481,066	1,761,052	1,491,207	1,572,116
Total value	$150,416	$173,740	$197,540	$158,508	$183,260
COTTON WASTE.					
Imports:					
United States	5,351,061	6,930,450	6,245.476	11,546,930	16,078,312
Austria-Hungary	21,558.562	22,649,403	22,245,959	24,188,452	25,177,098
Belgium	4,062,016	7,063,611	9,549,763	10,360.182	7,446,995
British India	2,435,887	1,860,040	1,960,131	6,617,174	8,426,949
France	17,677,986	17,702,897	16,405,476	19,596,888	19,410,819
Finland	581,138	636,915	....	....	....
Great Britain	23,059,245	17,651.089	20,127,541	22,676,968	27,613,999
Italy	2,851,017	2,047,653	2,197,348	3,170.027	3,439,873
Japan	....	260,366	450,625	601.202	1,842,403
Netherlands	12,720,892	11,765,629	11,824,934	13,226,412	14,620,396
Sweden	470,908	699.306	563,943	556,226	480,828
Switzerland	7,469,041	7,406,429	7,035.392	7,269.743	8,332,501
China	....	....	348,552	794,986	2,595,062
Other countries	3,190,530	1,926,179	1,575,423	1,637,593	1,343,497
Total	101,428,283	98,599,967	100.530.563	122,242,783	136,808,726
Total value	$5,496,848	$6,386,730	$5,969,040	$6,598,312	$7,384,664
Exports:					
United States	6,696,100	15,571,247	14,049,396	18,026,977	15,591,971
Austria-Hungary	14,740,986	19,035,811	22,193,489	21,325,090	23,143,241
Belgium	4,909,915	6,303,015	6,283,394	8,220,154	8,217,289
British India	680,346	592,382	....	....	....
Denmark	964.081	1,370,834	1,320.789	1,745,400	1,698,661
Finland	....	....	274,916	379,195	323,859
France	5,750,537	5,366,491	5.555.207	6,250,325	6,279,425
Great Britain	4,345,972	6,765,765	5,363,846	5,226,719	5,874,216
Italy	457,459	1,483,931	1,982,176	1,774,720	3,041,056
Netherlands	16,978,460	20,689,058	24,519,592	21,807,242	23,641,710
Norway	503,095	526,684	355.164	712,093	883,172
Portugal	101,854	....	....	....	....
Russia	....	....	222,887	904.116	1,514,355
Spain	116.184	458,782	279,326	358 251	526,684
Sweden	778,893	932.555	1,503.333	1,037,495	1,216,731
Switzerland	2,310,664	3,738,599	2,755.117	3,371,088	3,577.662
Other countries	1,884.952	2.320.586	3.330 964	2,861.159	2,489,680
Total	61.219.498	85.155,740	89.989.596	94,000,024	98,019,712
Total value	$3.256,792	$5,063,212	$5.767,216	$5,516,840	$6,226,794

HAMBURG.

[Consul Henry H. Morgan.]

The Hamburg consular district is not a manufacturing section and the use of cotton waste, batting, and linters is practically nil. All the imports into Hamburg of these articles are reshipped to the interior, where they are used by German spinners for a large variety of purposes.

The wholesale price of linters during the last five years has varied considerably, not only according to quality but principally according to market conditions. There are three grades of linters, which are classified according to staple and color. The two better grades are used for spinning purposes, mostly in the manufacture of blankets. Large factories engaged in this industry are located in Saxony, principally in the town of Zittau and the neighborhood. The manufacturers as a rule buy the linters direct from the producers in the Southern States of the United States.

The lowest grade of linters is utilized in the manufacture of gunpowder, gun cotton, etc.

The weight of the bales of linters is between 200 and 300 kilos (440 and 660 pounds).

Nearly all grades of cotton waste, except linters, are used for spinning purposes, generally in the manufacture of coarse or fine yarns. A small proportion of clean cotton waste is also used for stuffing purposes, principally for the padding in quilts.

In normal times batting is imported into Germany from the United States in small quantities, possibly not exceeding 300 or 400 tons per year. This batting comes from the establishments assorting rags and is handled by the rag trade. It is put up in bales of about 300 kilos each and is used principally for spinning cheap yarns and for making blankets.

OTHER GERMAN CITIES.

Prior to the outbreak of the war, Germany was first in the manufacture of cotton waste, Saxony being the great center of the industry, and there is every reason to believe that as soon as the channels of trade are reopened, this potential market will again be a great purchaser of waste material of all kinds. In considering the world field, therefore, due allowance must be given this market.

Breslau, Crimmitzschau, Werdau, and Zittau are desirable centers where productive results might be obtained. For manifest reasons at this time it is impossible to obtain definite data regarding the imports or exports of the individual fields and the production. The figures for the leading cities, such as Berlin and Hamburg, must be utilized.

Brunswick, Coburg, Leipzig, Plauen, and Stettin all reported an appreciable consumption of waste, linters, and batting prior to the war, but no figures are obtainable.

GREECE.

ATHENS.

[Consul Alexander W. Weddell.]

There are no imports into or exports from this district of cotton linters so far as can be gathered from official statistics. Quilt makers and others in the territory state, however, that a limited quantity is brought in from Egypt and Turkey, although their needs are supplied principally by local producers.

There is no export movement of cotton batting. Imports of this commodity into Greece by countries of origin were as follows for the five years ended in 1913:

Countries.	1909		1910		1911		1912		1913	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Lbs.		*Lbs.*		*Lbs.*		*Lbs.*		*Lbs.*	
Austria-Hungary	1,772	$188	48	$5	160	$16	....	....	4,763	$489
Belgium	....	....	11	2	....	....	....	....	....	....
France	395	42	96	9	341	37	121	$12	942	97
Germany	11	1	....	....	138	14	....	....	....	....
Italy	....	....	....	....	....	....	14	1	17,980	1,846
Turkey	....	....	107	11	42	4	....	....	....	....
United Kingdom	4,559	483	6,929	734	9,833	1,009	21,090	2,164	14,850	1,524
Total	6,737	714	7,191	761	10,514	1,080	21,225	2,177	38,535	3,956

This batting pays a duty under the Greek tariff of 145 drachmas per 100 okes, or $9.92 per 100 pounds.

No official figures of the movement of cotton waste, hard and soft, are obtainable. From various independent sources, however, it has been ascertained that while there is no export movement, there is a steady growth in the imports in direct proportion to the industrial development of the country. The amount brought in yearly is placed at about 150 tons, practically all of which is believed to be hard waste. England and Germany have been the chief sources of supply. Duty is levied on such imports at the rate of 20 per cent ad valorem.

The terms allowed in the past by British and Continental firms for these goods were usually four to six months; at present British firms are demanding cash against documents at a Grecian port.

Imports of linters, batting, and waste are made in great part by local agents who act for the ultimate purchasers. There are local mills that turn out cotton linters, batting, and waste, all, however, for local consumption. There are no exports.

The cotton mills are equipped almost entirely with British machinery; the linters produced locally are in large measure prepared on a three-horsepower machine manufactured in the United States, which is said to have an annual capacity of 16,000 pounds. The product is sold directly to local quilt and mattress makers; the quality of cotton employed is second and third class domestic.

The batting made locally is usually the product of child labor, each operative being supplied with a certain quantity of cotton, a lapboard, and a short stick; the cotton is leveled by means of the stick to the conventional thickness, spread on varicolored paper to which it is gummed, and sold in rolls containing 6 to 10 rectangular sheets, each measuring 50 by 60 centimeters.

Much of the soft waste used locally and in local mills is made up, with linters, into quilts and mattresses. Cotton wadding produced in the territory is insufficient for local consumption; both the local product and the wadding brought in from abroad are used in the manufacture of clothing.

With regard to the market for cotton waste a local agent made the following statement:

> The local production of white and colored waste is insufficient for local consumption. The imported waste has come principally from England, France, and Germany. Since the beginning of the war, however, these countries have stopped exporting waste, and Italy has begun to send its small overproduction for sale in the Hellenic kingdom.
>
> Importers of Piraeus and Athens have established a certain trade in the commodity with the United States, but no large orders have yet been given. The excessively high freight for a low-priced article has considerably interfered with the development of business, but it is not the only drawback. American sellers require the total amount of the invoice, including freight, to be prepaid, and while the samples sent have been good, local buyers are timid about making large outlays for fear the goods may not measure up to sample.

PATRAS.

[Consul A. B. Cooke.]

There is no foreign trade in linters in the Patras consular district so far as can be discovered from official sources. There is a small import trade in cotton batting, or wadding, amounting in 1910 to 5,566 pounds, worth $585; in 1911 to 12,133 pounds, worth $1,150; in 1912 to 7,436 pounds, worth $763; and in 1913 to 15,000 pounds, worth $1,538. The imports of wadding apparently consist of the material used by tailors for padding clothing. This wadding comes in small rolls, the fiber of the cotton being overlaid with a very thin tissue paper, which holds it in form. The width of the material is 18 inches, the length according to order. Tailors state that they import direct from Manchester, England, bringing the wadding in along with their other stocks. It does not appear that cotton batting or wadding is used here for making quilts. Quilt makers state that they use cotton lint, importing it in bales, chiefly from Egypt or Turkey.

SALONIKI.

[Consul Alfred R. Thomson.]

The Saloniki consular district provides cotton linters and a limited quantity of waste, the latter, however, being insufficient to supply domestic needs. Cotton batting used here is entirely of foreign origin and is imported from the United Kingdom and Italy. Italy and Turkey supply the deficiency of cotton waste. Some eight cotton mills in Greek Macedonia, operated on a small scale, produce annually about 170,000 pounds of linters, nearly all of which is exported to the United Kingdom. These mills use English machinery.

There are no official statistics that would indicate this district's foreign trade in cotton linters, batting, and waste. Some figures, however, have been furnished by local cotton mills and brokers. The general Macedonian trade in these commodities has suffered by the partition of Macedonia between Greece, Serbia, and Bulgaria since the Balkan wars of 1912–13. The port of Saloniki now (1916) possesses a hinterland comprising only Greek Macedonia. Some of the most important cotton mills have been closed and the production of linters and cotton waste correspondingly diminished. The imports of cotton batting from abroad have also undergone a sensible decrease. The only local factory that produced cotton batting was closed some years ago.

The following table shows the imports of cotton batting and cotton waste into Greek Macedonia during the four years ended in 1913:

Articles and countries.	1910		1911		1912		1913	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Batting:	*Pounds.*		*Pounds.*		*Pounds.*		*Pounds.*	
England	8,900	$1,100	8,500	$1,000	3,300	$410	....	....
Italy	8,900	1,100	8,000	910	3,100	400	11,030	$1,300
Waste:								
Turkey	125,000	7,100	125,000	7,100	....	....	....	....
Egypt	125,000	7,100	125,000	7,100	225,000	13,500	175,000	11,000

Cotton linters are exported directly to the United Kingdom without any manipulation in Macedonia. The packages vary in weight from 140 to 560 pounds each. Cotton batting is imported to Saloniki in bales of 100 kilos (220.46 pounds) each. This commodity is used by the local clothing and quilting industries. Waste is handled in bundles of 562 pounds each. Cotton waste is used here in the manufacture of carpets and coverlets.

ITALY.

FLORENCE.

[Consul F. F. F. Dumont.]

It is stated by leading wholesalers of cotton tissues that 300 to 350 tons of cotton batting are used yearly in the Florence district for cheap pillows, this demand coming entirely from housewives. The old-fashioned cotton mattresses are being replaced by the modern spring mattress or by mattresses stuffed with kapok. Quilts and bedspreads of cotton batting have been replaced by woolen blankets, thick or thin, as the need may be. A small quantity of batting is used by upholsterers. It is estimated that the average yearly consumption of cotton waste does not exceed 60 tons. The demand for batting and waste is supplied by dealers in Lombardy and Piedmont and none is directly imported. There are no wholesale dealers in linters, batting, or waste. There are no exports of cotton in any form from the district.

GENOA.

[Consul General David F. Wilber.]

The small amount of cotton linters imported into the Genoa district is used in conjunction with longer fibers in spinning. Little cotton batting is imported, silk waste being obtained cheaply and being regarded as preferable. Cotton waste is the chief article imported and is employed for many purposes, such as the adulteration of woolen goods, the manufacture of paper, etc.

The following are the figures of imports and exports of cotton batting and cotton waste for the Genoa district in 1913 and 1914:

Articles.	1913		1914	
	Metric tons.	Value.	Metric tons.	Value.
Batting:				
Imports	....	$155	5	$7,930
Exports	300	52,145	298	73,279
Waste:				
Imports	400	77,277	453	91,881
Exports	3,550	582,509	3,621	628,898

Machinery is brought in from Great Britain, Germany, and Austria-Hungary for the most part, but a few machines from the United States are imported.

TURIN.

[Vice Consul Piero Gianollo.]

The cotton industry in Piedmont, confining itself to high-grade articles, does not make use of linters or waste; there are no manufacturers of or dealers in batting. The waste made in the Piedmontese mills is sold to one or two small local rag factories and to dealers in Lombardy. None is exported to the United States from this consular district.

Experts state that in Italy linters are used only by a few low-grade hat makers in Lombardy; on the other hand, the trade in waste from Italy's 4,750,000 spindles and in waste imported from Germany, Switzerland, and England is considerable.

No official statistics are available for Piedmont only, and those for all Italy do not differentiate the various qualities of cotton waste. The following are the Italian imports and exports, in metric tons of 2,204.6 pounds, for the years 1910–1914, of cotton waste of all kinds, by principal countries of origin and destination:

Countries.	1910	1911	1912	1913	1914
IMPORTS.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Germany	762	801	377	629	591
Switzerland	559	216	195	333	218
United Kingdom	505	324	358	305	268
Other countries	469	791	135	476	384
Total imports	2,295	2,132	1,065	1,743	1,461
EXPORTS.					
Argentina	329	178	395	231	148
Austria-Hungary	591	440	595	645	348
France	663	551	931	1,739	1,128
Germany	1,243	1,289	1,340	1,977	2,557
Roumania	267	436	633	144	509
Switzerland	635	540	1,076	728	1,041
Turkey in Europe	463	375	54	151	121
Turkey in Asia	243	296	38	136	62
United States	2,325	1,803	1,528	1,299	1,208
Other countries	909	756	1,897	1,883	1,737
Total exports	7,668	6,664	8,487	8,933	8,859

OTHER ITALIAN CITIES.

Catania, Leghorn, Palermo, and Rome are limited markets for waste, batting, and linters, which are supplied by the producing centers of northern Italy. The consumption being small, there is little prospect, in the estimation of the American consuls resident at these points, of developing a worth-while export trade.

NORWAY.

BERGEN.

[Consul B. M. Rasmussen.]

Cotton manufacturing is not a leading industry in the Bergen district; the mills are few in number and engage in special rather than general manufacture. There is a good market for cheaper-grade cotton and mixed cotton and wool goods, which the local mills aim to supply. Their manufactures comprise cotton batting, blankets, canvas cloths, flannels, sheeting, shirting, toweling, twills, and underwear.

According to information obtained from importing firms through which cotton deals are made, the annual imports of hard and soft waste exceed 1,000,000 pounds. It is soft waste that is used by the factories for mixing with wool.

STAVANGER.

[Consul Maurice P. Dunlap.]

There are no available statistics showing Stavanger's imports of cotton linters, batting, and waste, but, except what is known here as "twist," there are practically no imports. There are no exports of any of these cotton by-products.

One large factory in this district uses soft cotton waste in making woolen underwear. From 10,000 to 13,000 pounds are used yearly by this establishment for sweaters, jackets (hunting jackets), and stockings. Practically all this, however, is waste made in the mill itself. Occasionally the supply has been supplemented by a little from England, which comes carded, in bales of about 100 kilos (220 pounds). This factory is the only large user of soft cotton waste in the Stavanger district.

For cleaning purposes on board ship probably 30 tons of "twist" are used annually in this district. This quantity may be roughly divided between two ports, Stavanger and Haugesund, the former using at least two-thirds. Formerly the supply came mainly from England and France, purchased directly from Christiania agents.

The twist generally comes in bales weighing about 250 kilos (551 pounds) each. These are sewed up in jute and bound with iron hoops.

PORTUGAL.

LISBON.

[Consul General W. L. Lowrie.]

There are no imports of cotton linters into Portugal. Cotton batting is imported in small quantities, especially for use by tailors, upholsterers, etc. Of the raw cotton imported (about 18,000 tons a year), approximately 10 per cent is cotton waste. Statistics as to the exact quantities of waste imported are not obtainable, however, because the import tariff does not make provision for a separate classification of cotton waste.

The following table shows the imports of cotton batting into Portugal for the years 1909 to 1912:

Countries.	1909		1910		1911		1912	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Belgium					6,614	$1,495		
France	254	$92						
Germany	50,147	7,833	31,868	$5,142	13,137	2,162	34,432	$3,954
Italy							29,180	4,341
Netherlands					34,358	6,580	6,415	1,245
United Kingdom	1,173	289	3,947	677	611	247	789	239
Other countries	190	64	389	98	44	56	290	166
Total imports	51,764	8,278	36,204	5,917	54,764	10,540	71,106	9,945

Portugal does not export any cotton linters or batting. There is a small exportation of cotton waste, valued in 1912 at $10,636. Belgium has been the principal purchaser. The figures for exports of cotton waste from Portugal for the years 1909–1912 are given in the following table:

Countries.	1909		1910		1911		1912	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Total exports	735,364	$6,079	1,039,563	$11,690	905,720	$8,602	1,162,191	$10,636
Belgium	309,915	2,925	497,906	4,335	575,142	4,953	905,495	5,771
France							37,832	1,130
Portuguese colonies							13,511	1,392
United Kingdom	387,796	1,759	468,133	5,145	219,115	1,955	189,521	1,988

OPORTO.

[Consular Agent W. H. Stuve.]

The imports of cotton linters, batting, and waste at Oporto, where a large percentage of the cotton used in Portugal is received, are practically nil. As the duties on waste and cotton are the same, both articles appear in the statistical returns as "cotton," so that no details are obtainable as to the quantity and value of "waste" imported.

Linters and batting are not exported from Oporto. Exports of cotton waste for 1911, 1912, and 1913 were as follows: 1911, 616,000 pounds, valued at $3,700; 1912, 891,000 pounds, valued at $5,100; 1913, 718,300 pounds, valued at $7,100.

RUSSIA.

BATUM.

[Consul F. Willoughby Smith.]

There are no foreign imports into the Caucasus of cotton linters, batting, or waste. The duty on cotton waste amounts to 5.75 rubles per pood ($0.082 per pound) and is prohibitive. Cotton waste is not used to any extent in this district, its place being taken by hemp waste. Cotton ends are sometimes used in connection with machinery requiring particular attention and cleanliness. The waste used is very inferior tow. For batting and linters the duty is 7.90 rubles per pood ($0.113 per pound).

MOSCOW.

[Consul General John H. Snodgrass.]

Linters, batting, and waste are extensively used in Poland, but the official statistics do not show the imports separately from imports of raw and carded cotton. Linters and waste are used in the manufacture both of coarse cloth and of guncotton. Batting is extensively used in quilts and as an interlayer for winter clothes, for packing, etc. Before the war practically all the foreign waste imported into Russia was used in the mills of Poland, especially at Lodz, a most important cotton-manufacturing center. " Fly " particularly was imported for the use of the Lodz mills. Waste is packed in bales of various weights, covered with jute cloth, as are cotton bales. Two to four months' credit is frequently allowed.

PETROGRAD.

[Consul North Winship.]

Linters are not produced at all in this consular district, as no cotton is ginned here. All the ginning mills are in Turkestan, where the Russian cotton is grown. Linters, batting, and waste are extensively used, however, and are imported in considerable quantities. Cotton batting is in large demand in Russia for the lining of the great coats and fur coats universally worn in the rigorous winters.

The size of the bales of waste varies greatly, ranging from 72 to 180½ pounds.

RIGA.

[Consul Douglas Jenkins.]

The imports of cotton waste at Riga have declined greatly in recent years, owing to the increasing production of the mills at Lodz and other Russian centers of cotton manufacture. Now that Lodz is cut off from the Russian market, however, the supply of waste is said to be running low, and prices have gone up rapidly.

In 1910 the imports of cotton waste at Riga were valued at $11,720 and in 1911 at $12,988; in 1912 they fell to $3,154 and in 1913 to $3,428. There is no reference in the statistics to imports of linters or batting, and from Riga there are no exports of either of these articles nor of waste.

Most of the cotton waste handled here is sold to factories and mills in the interior and to the Government railway lines.

The qualities of waste and batting in this district vary greatly, ranging from the best grades to the lowest. The terms of sale are two to four months' credit.

In this market waste is packed in bales varying in weight from one pood (36.11 pounds) to 20 poods (722 pounds), according to the order of the purchaser. The bales are made up in jute bagging bound with coarse cordage.

A local dealer estimates that 5,000 tons of cotton waste, white and colored, are consumed yearly in this consular district. The waste comes unassorted from the cotton mills to the warehouses in Riga. It is cleaned and assorted here, and some of it is manufactured into batting. Both hard and soft waste are handled, but it is impossible to say in what proportion, for there are no statistics. Cotton and yarn mills in and about Riga are estimated to dispose of 200 to 300 tons of waste per annum, all of which is taken by local dealers.

OTHER RUSSIAN MARKETS.

Odessa does not merit serious consideration on the part of American exporters of waste, batting, and linters, according to Consul John A. Ray. The limited supply consumed is obtained from Moscow, Petrograd, and the Polish textile centers.

Lodz and the other textile-manufacturing cities of Poland are the chief Russian centers of production and utilization of cotton-waste products.

SPAIN.

BARCELONA.

[Consul General Carl Bailey Hurst.]

The cotton industries of Spain are largely centralized in the Province of Catalonia, and Barcelona, its capital, ranks, after Liverpool, Bremen, and Havre, as the fourth cotton port of Europe. During the season from September 1, 1913, to August 31, 1914, some 388,486 bales of cotton were unloaded on the quays of this city. Of these, 275,709 bales came directly or indirectly from the United States, an increase over the previous season of 14,150 bales. The official statistics of the Spanish Government do not, however, specify separately the imports and exports of cotton linters, batting, and waste, but group these articles with raw cotton.

Large quantities of cotton linters and waste are employed in the cotton industries here. Some of these materials are imported, while a portion is produced locally in connection with the cotton manufactures of this country. The important cotton mills of Spain, of which there are over 600, are equipped for all processes; hence there is no actual need of importing linters, waste, and batting. In order to distinguish the articles described as cotton, dyed, sterilized, absorbent, carbolized, and the like from raw cotton, they are tested by throwing them into water. The raw cotton does not sink.

France, Germany, and Great Britain are the chief sources of imports of cotton linters, batting, and waste. While large quantities of manufactured cotton goods and thread are exported, an almost inappreciable amount of raw cotton leaves the country. Linters and waste form a part of such shipments, and no distinction is made in the statistics. Of these small shipments France, Germany, Great Britain, Italy, Portugal, and Turkey are the usual purchasers.

Before the business upheaval caused by the war, the usual terms of payment were cash against bill of lading here, but now payment is made in advance in the United States. Cotton linters, batting, and waste are sold in packages of about 500 pounds.

Cotton linters are largely used here in the manufacture of absorbent cotton of various kinds, sterilized and carbolized, of which the exportation is at present far greater than under ordinary circumstances. It is estimated that not less than 15,000 bales of cotton, including linters, were devotéd to this purpose during the last cotton season, besides a considerable quantity of waste. Linters are also extensively employed in the manufacture of canton or cotton flannel and napped goods, which are largely demanded for the domestic as well as the export trade.

Cotton batting, or wadding, in sheets is required for making light bedquilts and lining heavy garments. Some cotton waste finds its way into the manufacture of absorbent cotton, but most of it is devoted to the production of what are known here as "mantas," a kind of heavy cotton blanket used as a traveling rug or lap robe for carters. Another part is mixed with wool in the manufacture of the better classes of these mantas, while some hard waste goes to making coarse thread. Soft waste is used in making guncotton, and the various uses of the hard waste correspond to those in the United States.

Exports of cotton waste declared at this consulate general for shipment to the United States and the Philippine Islands in 1914 were valued at $551,092. In 1913 the value was $463,298.

OTHER SPANISH CITIES.

Jerez de la Frontera, Madrid, Malaga, Seville, and Valencia are supplied mostly from Barcelona. These markets may be reached more advantageously through the great port city than by direct shipments.

SWEDEN.

[Consul Emil Sauer, Goteborg.]

Cotton linters are not produced in Sweden, as there are no cottonseed-oil mills and no cotton seeds are imported. The imports, moreover, under normal conditions are not large. Practically the only use for linters is in the manufacture of gunpowder and guncotton, and the amount consumed in the factories here is small. Linters are not used in the manufacture of mattresses.

Batting for other than medical use is produced in Sweden in practically sufficient quantities to supply the home market. During the years 1908 to 1912, inclusive, the production was valued as follows: 1908, $223,007; 1909, $200.148; 1910, $263,437; 1911, $231,340; 1912, $266.494. The imports of batting, practically all of which is cotton, mostly for medical purposes, are shown in the following table. About 95 per cent of these imports come from Germany and almost all the rest from Denmark.

Years.	Pounds.	Value.	Years.	Pounds.	Value.
1908	290,195	$45,362	1911	408,964	$74,467
1909	328,319	51,934	1912	233,774	42,627
1910	313,380	49,218			

The exports of batting from Sweden during 1908 to 1911 went for the most part to Finland and Denmark. In 1912 almost half went to Germany. The quantity and value of batting exported during these years were as follows:

Years.	Pounds.	Value.	Years.	Pounds.	Value.
1908	107,351	$22,586	1911	37,791	$7,298
1909	83,435	17,242	1912	162,467	29,625
1910	56,852	9,007			

The amount of cotton waste produced by the Swedish mills is not very considerable, and most of the waste used in this country is therefore imported. In 1914 the imports amounted to 4,770,851 pounds, as against 7,333,432 pounds in 1913 and 6,416,633 pounds in 1912. These figures include cotton waste of all kinds. The quantity and value of imports of cotton waste for the years 1908 to 1912 are shown, by countries of origin, in the following table:

Countries.	1908	1909	1910	1911	1912
Belgium:					
Pounds	150,448	167,297	404,140	840,783	640,330
Value	$9,144	$12,202	$29,477	$61,325	$66,164
Denmark:					
Pounds	218,114	155,900	186,189	128,717	215,350
Value	$13,257	$11,371	$13,580	$9,388	$22,252
Finland:					
Pounds	....	....	26,328	....	33,230
Value	....	....	$1,920	....	$3,434
France:					
Pounds	318,949	480,962	533,541	591,004	676,305
Value	$19,386	$35,081	$38,915	$43,107	$69,881
Germany:					
Pounds	488,509	1,005,623	1,497,488	1,705,379	2,380,029
Value	$29,692	$73,348	$109,223	$124,386	$245,925
Italy:					
Pounds	685,516	604,609	187,924	199,496	180,433
Value	$41,667	$44,099	$13,707	$14,551	$18,644
Netherlands:					
Pounds	1,191,746	1,090,878	783,022	1,136,862	1,060,708
Value	$72,436	$79,566	$57,112	$82,920	$100,601
Norway:					
Pounds	385,392	293,623	284,357	305,466	359,658
Value	$23,425	$21,416	$20,740	$22,280	$37,163
United Kingdom:					
Pounds	232,288	261,241	544,822	515,787	797,132
Value	$14,119	$19,054	$39,738	$37,620	$82,366
United States:					
Pounds	7,209	....	48,876	53,833	54,399
Value	$438	....	$3,565	$3,926	$5,621
Other countries:					
Pounds	176	22,333	37,752	71,000	19,059
Value	$11	$1,629	$2,754	$5,179	$1,969
Total:					
Pounds	3,678,347	4,082,466	4,534,439	5,548,327	6,416,633
Value	$223,575	$297,766	$330,731	$404,682	$663,020

As shown by the foregoing table, nearly 40 per cent of the imports of cotton waste came from Germany, 16 per cent from the Netherlands, 13 per cent from the United Kingdom, a little over 10 per cent from France, and a little over 10 per cent from Belgium. Less than 1 per cent came from the United States.

Most of the waste imported, however, appears to be transit goods, as is shown by the following table of exports of cotton waste from Sweden during the years 1908 to 1912:

Countries.	1908	1909	1910	1911	1912
Belgium:					
Pounds	22,743	20,825	68,037	....	29,983
Value	$1,106	$1,139	$3,722	....	$3,098
Denmark:					
Pounds	25.600	38,610	43,841	....	117,487
Value	$1,245	$2,112	$2,398	....	$12,140
Germany:					
Pounds	374,969	427,324	664,226	778,822	455,177
Value	$18,233	$23,376	$36,335	$42,604	$47,083
Netherlands:					
Pounds	19,412	14,209	103,031	179,396	97,619
Value	$944	$777	$5,636	$9,814	$10,076
Norway:					
Pounds	66,240	62,931	56,694	66,428	640,990
Value	$3,221	$3,442	$3,101	$3,634	$66,232
Russia:					
Pounds	....	35	....	....	221,785
Value	....	$2	....	....	$22,917
United Kingdom:					
Pounds	59,253	158,695	251,382	276,702	82,667
Value	$2.881	$8,682	$13,752	$15,136	$8,542
Other countries:					
Pounds	18,865	17,293	15,469	233,142	13,817
Value	$917	$946	$846	$12,754	$1,428
Total:					
Pounds	587,082	739,922	1,202,680	1,534,490	1,659,525
Value	$28,547	$40,476	$65,790	$83,942	$171,466

No cotton waste is exported from Sweden to the United States.

The Swedish official statistics of manufactures give but one cotton-waste factory (trasselfabrik) for the whole country. This factory receives hard waste from Swedish cotton mills and from abroad, cards it, and mixes it with other material. Soiled or used cotton waste is washed, disintegrated, and rendered fit for use again. The product is used for making quilts and is sold to batting factories. The value of the output of this factory is given as follows: In 1908, $117,281; in 1909, $110,385; in 1910, $171,956; in 1911, $154,419; and in 1912, $184,532.

One of the principal uses made of cotton waste in Sweden is in the manufacture of batting. It appears, however, that the batting factories (vaddfabriker), as a rule, wash and card the waste in their own establishments.

Linters and waste are packed in bales of the same weight as cotton bales, averaging 500 pounds.

SWITZERLAND.

ZURICH.

[Consul General Francis B. Keene.]

The manufacture of cotton goods is one of the principal Swiss industries and the country, therefore, produces considerable quantities of cotton waste of all kinds. The factories sell it exclusively to Swiss dealers, who sort it out by qualities, pack it in bales, and ship it chiefly to Germany and Austria. The trade with Germany, in both imports and exports of cotton waste, is far larger than with any other country and is steadily growing. The imports of cotton waste from the United States, which in 1910 were valued at $2,534, have also considerably increased, reaching a total of $12,429 in 1913. The waste is used chiefly for spinning purposes.

The cheap, medium grade of cotton linters is manufactured into nitrated cotton, but the better qualities are used in the manufacture of batting or rough yarns. Only small quantities of linters have been imported from the United States. There are comparatively few important dealers in linters in Switzerland, the principal consumers being in Germany and in Austria.

In general, linters are packed in bales, firmly compressed. Cotton waste is similarly packed for over-sea shipments, but for the Continental market it is handled chiefly in jute bags of about 100 to 150 pounds. Terms of purchase are usually 30 days with 2 per cent discount for cash.

The imports of cotton waste into Switzerland from 1911 to 1914 and the exports therefrom are shown in the following table:

Countries.	1911		1912		1913		1914	
	Met. tons.	Value.	Met. tons.	Value.	Met. tons.	Value.	Met. tons.	Value.
IMPORTS.								
Austria-Hungary	425	$32,802	471	$40,872	547	$52,757	370	$35.666
France	422	24,451	544	42,012	481	41,766	308	26,741
Germany	1,203	174,149	1,664	240,835	1,603	247,488	685	105,780
Italy	528	30,589	830	48,045	926	62,517	790	99,143
United Kingdom	207	59,984	155	29,876	127	24,588	......	......
United States	33	6,921	11	2,104	64	12,429	124	23,874
All other countries	36	4,713	138	6,513	136	6,350	28	4,277
Total	2,854	333,609	3,813	410,257	3,884	447,895	2,305	295,481
EXPORTS.								
Austria-Hungary	94	14,723	153	24,508	176	40,352	810	162,112
France	181	37,569	102	24,806	162	37,567	85	16,438
Germany	3,220	545,563	3,427	562,565	3,789	682,281	3,634	663,691
Italy	264	65,577	215	49,488	258	67,102	172	45,157
Roumania	66	14,997	84	20,301	118	31,268	148	40,878
All other countries	118	22,775	105	18,651	98	19,607	39	5,553
Total	3,943	701,204	4,086	700,319	4,601	878,177	4,888	933,829

Switzerland's foreign trade in cotton batting during the years 1911 to 1914, inclusive, is shown in the following table:

Classification and countries.	1911		1912		1913		1914	
	Met. tons.	Value.	Met. tons.	Value.	Met. tons.	Value.	Met. tons.	Value.
IMPORTS.								
Bleached and chemically pure	16.0	$7,431	17	$8,202	23.1	$11,291	16	$7,526
Germany	13.0	6,080	15	7,382	19.0	9,216	12	5,838
Italy	2.0	820	2	820	4.0	2,027	3	1,640
All other	68.0	27,398	71	20,206	64.4	18,622	42	11,265
France	3.0	1,094	3	703	2.0	552	2	463
Germany	63.0	25,534	67	19,252	61.0	17,717	39	10,595
Total	84.0	34,829	88	28,408	87.5	29,913	58	18,791
EXPORTS.								
Bleached and chemically pure	8.1	3,147	37	15,777	31.0	12,965	114	51,849
France	0.1	60	18	9,235	13.0	5,599	91	42,482
Italy	5.0	2,103	9	3,805	13.0	4,698	14	5,036
All other	3.3	1,080	56	11,593	69.0	15,661	95	16,893
Bulgaria	......	......	23	4,497	9.0	1,340	......	......
France	1.2	414	8	1,792	30.0	8,298	27	5,279
Germany	1.3	400	19	4,093	24.0	4,844	43	7,178
Total	11.4	4,227	93	27,370	100.0	28,626	209	68,742

OTHER SWISS CITIES.

Basel registers a slight trade in linters, batting, and waste, being supplied from Zurich for the most part. Berne and Geneva likewise afford markets of limited consequence.

TURKEY.

[Consul General G. Bie Ravndal, Constantinople.]

Cotton linters are not known in this district. Cotton batting, however, or cotton used in making quilts, mattresses, etc., is prepared from a low quality of cotton, mainly imported from Egypt, although a certain amount of the inferior native product is also used for this purpose. This cotton is packed in bales of approximately 440 pounds each, and the total consumption in this district for the manufacture of quilts, mattresses, etc., is about 800 bales annually.

The process of batting is carried on locally by means of native hand cards. This card consists of a string stretched on a stick, the entire device being very similar in appearance to a bow, and this string is plunged into the cotton and struck, thus causing it to "open" or become more voluminous. In the case of mattresses, this batting is repeated at intervals of a few months, to keep the mattress elastic.

The only cotton imported into this district in a batted condition is that sold to foreigners in the dry-goods stores of the foreign quarters of Constantinople. No figures for such imports are available, but the amount is insignificant.

In normal times, cotton waste is imported from Germany and England. All of it is hard waste, used mainly for wiping machinery. It is packed in bales of either 220 pounds (100 kilos) or 550 pounds (250 kilos), and the total annual imports amount to about 200 tons, of which approximately 125 tons are German and the rest English. The German waste is in various colors; the English is white.

A large proportion of the cotton grown in Turkey is exported in the raw state. There is, however, besides the mills at Mersina and Smyrna, a spinning mill at Yedi-Coule, near Constantinople, but the price of the hard waste from this mill is so high that users of this article prefer to purchase the imported waste. It is understood that this mill is more interested in respinning the waste than in preparing it for wiping and packing machinery.

UNITED KINGDOM.

BELFAST.

[Consul Hunter Sharp.]

Cotton spinning in this consular district is almost negligible, and according to the returns of the Belfast Harbor Commissioners, there were no exports of cotton batting (locally termed wadding) during the five years 1910 to 1914. Neither do cotton linters appear in the trade returns. Exports of cotton waste amounted to 27 and 18 tons, respectively, in 1910 and 1911, but dropped to 1 and 2 tons in the three following years. These small shipments were principally, if not entirely, cotton thrums exported to the Manchester district of England.

Cotton batting and cotton waste imported during the five years ended in 1914 were as follows:

Articles.	1910	1911	1912	1913	1914
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Cotton batting	23	10	11	17	24
Cotton waste	431	470	484	428	410

Cotton waste is imported from England and Scotland in bales of 112 pounds, containing approximately 100 pounds net. The cheaper grades are stated to have more or less jute mixed with the cotton. Practically the entire local demand for cotton waste is for machine wiping. It is imported by mill furnishers, who sell to railways, factories, tractor-engine owners, and similar firms. There are no factories here using cotton waste for manufacturing purposes. Except for the small quantities that may at times be found mixed with flax waste no cotton waste is exported from this district to the United States.

Nearly all the cotton wadding sold here is bought in Manchester. It comes in sheets measuring about 36 by 20 inches, one dozen sheets to the packet. It is sold also in 12-yard rolls, but there is very little demand for it in this form in Belfast. About half of the total quantity imported is black and of the remainder two-thirds is gray and one-third bleached.

BRADFORD.

[Consul Augustus E. Ingram.]

So far as can be learned there had been no imports of cotton linters, batting, and waste into this consular district during the five years preceding the war. One large firm of carpet manufacturers uses certain low grades of soft cotton waste, but it buys its supplies in this country.

No linters or batting is produced here, but the weaving sheds where cotton warps are used with wool or worsted weft produce thread waste. Most of this is bought by Lancashire firms, which send their buyers direct to the mills. A certain quantity, however, has been shipped to the United States for several years, the maximum being reached in 1903, when these exports were valued at $10,072. In 1914 the shipments amounted to 141,383 pounds, valued at $7,096. The declared values of such shipments to the United States during the five years ended in 1914 have been as follows: 1910, $8,644; 1911, $5,952; 1912, $8,318; 1913, $8,212; 1914, $7,096.

The usual Bradford terms are payment in 14 days, but for export shipments, if a firm is satisfied as to the purchaser's financial standing, any reasonable terms are extended. There are apparently no importers in this district, and only two firms export cotton waste. For export the bales are usually packed by hydraulic press and weigh from 600 to 700 pounds each.

Instead of wiping waste the mills in this district are using an increasingly large quantity of wiping cloths, or sponge cloths, as they are called locally, made from a rough thick count of yarn that is in turn made of soft cotton waste. Formerly these wiping cloths were made of a silk noil yarn, but because of the price cotton has now been substituted. The advantage of the cloths over ordinary wiping waste is that the cloths are easily washed and the oil with which they become saturated is recovered. One firm states that its production of these cloths has increased several fold during the last few years, until now it is turning out 500 gross each week. The cloths are sold with a contract to wash and mend them when needed during a specified period, and by this means last year, washing approximately 250,000 cloths a week, the firm referred to recovered about 300 tons of oil. Some firms, however, especially in the engineering trade, purchase the cloths outright and attend to the washing themselves in order to benefit by the recovery of the oil. Wiping cloths are now being exported to the United States, where it is understood that the same practice of recovering the oil is being followed.

Another advantage that the cloths have over ordinary wiping waste is said to be their freedom from dust or grit that is injurious to machinery parts.

CARDIFF.

[Consul Lorin A. Lathrop.]

Cotton waste is largely used in South Wales, but the sale of cotton linters and cotton batting is very limited. Gray waste, long, clean, and free from such whitening mixtures as china clay, is the product in demand. It is used for cleaning the machinery of the coal mines and of the great fleet of steamships trading from South Wales ports. It comes from Manchester. There are no statistics, but large dealers estimate the annual consumption as fully 25,000 tons. None of this is exported, but probably half goes into vessels in the form of engineers' stores.

An obstacle in the way of shipments direct from the United States to South Wales is to be found in the lack of wholesale merchants and jobbers. Manchester firms deal directly with the consumer or with the firms that sell to the consumer. There is, for instance, no intermediary between Manchester and a large coal mine, and the ship chandlers and marine-store dealers that supply ships also buy direct. Many of the firms, however, do so considerable a business as to justify their importing direct.

CORK.

[Consul Wesley Frost.]

The trade in linters, batting, and cotton waste in Cork is decidedly small, the total consumption being estimated at less than $75,000 per annum.

For cushions and furniture upholstery, as well as for wadding in cheap saddlery, the common article here is kapok, which is slightly less expensive than linters and is said not to mat so quickly. For filling bedquilts feathers are much more frequently used than in the United States, but the principal kind of cheap bedding is wadded with woolen flock produced by macerating rags. These flock quilts are not washable, in general.

Rag flock is produced by a firm in Leixlip, County Dublin, from which Cork dealers in bedding obtain a good share of their stock.

Cotton batting is mainly purchased from Manchester, which also supplies absorbent cotton. Cotton linters have occasionally been taken here in trial orders, but none very recently.

DUBLIN.

[Consul Edward L. Adams.]

According to statistics for the port of Dublin, Ireland, the number of pounds of cotton wadding imported was 53,760 in 1910, 26,880 in 1911, 29,120 in 1912, 26,880 in 1913, and 35,840 in 1914. Of cotton waste for the same years the imports were 716,800 pounds, 795,200 pounds, 712,320 pounds, 564,480 pounds, and 739,200 pounds, respectively. Values and countries of origin are not officially given, but dealers state that they buy practically all their waste from England, the Manchester district being the main source. As far as could be ascertained, no linters are made or imported in this district, nor are waste and batting manufactured here. Waste is usually bought in packages of 112 pounds. Limited quantities of flax waste and bleached mutton cloths are imported. Waste is used for yachts, power stations, and all kinds of machinery. Dealers generally will pay cash on delivery, with varying discounts, and desire c. i. f. Dublin quotations in English currency. One firm pays quarterly with 2½ per cent discount.

EDINBURGH.

[Consul Rufus Fleming.]

East Scotland is not an important market for cotton or cotton materials. In the fishing-net industry, which is not a large one here, raw cotton is used to a limited extent. It is American cotton, purchased from Manchester importers.

Linters are neither imported nor manufactured and are practically unknown in the district. The cotton seed, principally Egyptian, worked by the local cottonseed oil and cake mills—about 20,000 long tons per annum—is neither ginned nor decorticated here, but passes through the mills in the condition in which it is received.

The consumption of cotton batting is small. The principal users are dressmakers, tailors, and firms or individuals engaged in various kinds of fancy needlework. The product is sold by the principal dry-goods houses and comes to this market almost exclusively from Manchester.

A considerable quantity of hard cotton waste is used in machine shops and shipbuilding and engineering establishments, and also by railway and shipping companies. The product is handled in this district by middlemen only, who buy from Manchester and Glasgow cotton mills. Local ship chandlers and oil merchants sell cotton waste. The usual terms of credit are 30 days, with discount according to quantity.

GIBRALTAR.

[Consul R. L. Sprague.]

Cotton linters and batting are not sold here at all. Cotton waste, however, is imported by ship chandlers, hardware dealers, and barge owners. Before the war it came solely from England, but owing to the high rates of freight and the unavoidable delay in delivery, importers have been compelled to place most of their orders in Barcelona, the center of the Spanish cotton industry. There are no official statistics of the imports of this colony, but it is estimated that the quantity received yearly does not exceed 40 tons. The largest consumers are the Government dockyard, ship chandlers, and barge owners. Considerable quantities are now in demand by the large number of steamers calling at this port. Spanish waste is slightly cheaper than English, but the quality is somewhat inferior. American waste will always find a market provided it can equal the English product in price and quality.

LEEDS.

[Consul Homer W. Byington.]

The Leeds consular district is inland, and no statistics are obtainable as to the quantities of cotton linters, cotton batting, and cotton waste imported or exported. Extended inquiries, however, have secured the following data:

Soft cotton waste is used here in the making of the lower-grade cloths, and supplies are obtained on contract from the adjoining county of Lancashire. The soft wastes are blended with the mungo shoddies and spun into woolen yarn. None is exported. Goods are delivered packed in a kind of bag (locally known as "sheets"), of dimensions about 3 by 1½ yards.

Hard waste (locally known as "thrums") from the factories using cotton warps is produced within the district and is exported at the rate (estimated) of 100 tons per week. No hard waste is imported.

Cotton linters are of small account and when brought in appear to be used in the same manner as the soft wastes. One firm of bedding manufacturers reports that it buys linters in Liverpool and uses them for making batting (wadding). Other similar firms state that they use no linters but use kapok for their waddings.

Hard wastes are contracted for at the mills, the dealer taking the waste as made. Hard wastes are generally opened and then are used for cleaning purposes. They are sold within the district and have been exported to Germany and Canada. Terms have been cash against documents. The wastes are packed in square-ended bales, with iron hoops, holding 7 hundredweight (784 pounds).

LIVERPOOL.

[Consul Horace Lee Washington.]

Liverpool's importance in the trade in cotton linters, batting, and waste is that of a seaport and distributing center. One firm uses a relatively small quantity of linters in the manufacture of lint. Manchester and other manufacturing cities nearby consume all three of these cotton products in large quantities.

The official statistics do not show the trade in linters or batting, but according to a leading importer and merchant, during the 12 months from September 1, 1913, to August 31, 1914, 3,000 bales of linters were imported from the United States, 750 bales from Brazil, and 660 bales from Peru and Chile. The average weight of the bales of American linters is 450 to 550 pounds. American exporters generally draw at 60 days sight on Liverpool banks with documents attached. Frequently cash is paid against shipping documents.

Cotton waste is imported from the United States principally, but also in small quantities from Brazil, Peru, Japan, China, and India. The imports and exports at Liverpool of "cotton waste from worked cotton" during the years 1909 to 1913 were as follows:

Years.	Imports.		Exports.	
	Pounds.	Value.	Pounds.	Value.
1909	2,937,700	$97,660	16,216,600	$923,734
1910	5,185,435	350,207	21,298,200	1,352,940
1911	3,281,851	245,570	22,890,000	1,518,065
1912	6,337,471	393,188	21,752,200	1,340,009
1913	6,908,267	467,143	23,717,100	1,475,424

The imports of cotton waste from the United States during the years 1909 to 1914 were as follows:

Years.	Pounds.	Value.	Years.	Pounds.	Value.
1909	420,634	$25,242	1912	3,392,589	$184,479
1910	1,993,902	156,754	1913	2,208,400	166,551
1911	709,664	64,801	1914	2,162,299	112,707

The usual terms of purchase are cash against documents. There is no uniformity in the weight of cotton baled waste, which varies from 150 to 800 pounds per bale. The average weight of American bales is about 500 pounds and of Indian bales 400 pounds. Cotton waste is almost invariably purchased and sold on bulk sample.

LONDON.

[Consul General Robert P. Skinner.]

The table that follows shows the quantity and value of imports and exports of "cotton waste from worked cotton" for the United Kingdom during the years 1910, 1911, 1912, 1913, and 1914.

The term "cotton waste," as used in the official statistics, includes American super strips, American best strips, American ordinary strips, willowing strips, Egyptian best strips, American knur laps, American ring laps, peeler comber, American droppings, cardroom sweeps, spinner sweeps, No. 1 cop waste, ring cop waste, and engine-cleaning waste. Statistics of linters and batting imports and exports are not compiled.

Years.	Imports.		Exports.	
	Pounds.	Value.	Pounds.	Value.
1910	37,710,833	$3,173,566	87,042,400	$6,007,903
1911	31,086,976	2,448,390	97,614,700	7,107,504
1912	40,065,608	2,628,898	99,660,700	6,764,002
1913	34,839,252	2,510,467	110,737,900	7,596,056
1914	34,363,451	2,574,130	69,979,700	4,781,949

Many firms in this district gather cuttings, rags, old curtains, cotton rope, etc., out of which cotton waste is made, but no manufacture of waste, linters, or batting is carried on in the vicinity of London. Cuttings, rags, etc., are baled and shipped to Manchester, to be pulled or otherwise treated. There are no importers in this district.

MANCHESTER.

[Consul Ross E. Holaday.]

The principal use of cotton linters is for the manufacture of absorbent cotton wool, the material being cleaned by willowing, then bleached and carded and put in rolls ready for sale. On the Continent of Europe, it is reported, linters are also extensively used for spinning into coarse counts, such as carpet and bump yarns.

Batting or wadding is largely manufactured in the Manchester district, and in consequence only very small quantities are imported. It is used by tailors, upholsterers, etc., and the very low qualities are now used extensively for banana packing. The gray or black batting used by local tailors is made up in 12-yard pieces.

Cotton waste is both produced and used extensively in the cotton mills of this district. Sheetings, flannelettes, quilts, bedcovers, cotton blankets, sponge cloths, towels, and cretonnes are among the goods manufactured from waste, which also is bundled into hanks and used in making ropes and twines. Sized waste, doubled waste, and other waste not suitable for respinning is made up for cleaning.

The foreign trade of Manchester in "cotton waste from worked cotton" during the five years 1909 to 1913, inclusive, is shown in the following table:

Years.	Imports.		Exports.	
	Pounds.	Value.	Pounds.	Value.
1909	18,430,629	$1,278,166	55,413,000	$3,130,901
1910	27,726,048	2,568,733	51,936,300	3,731,607
1911	21,857,070	1,865,324	55,548,500	4,099,023
1912	28,326,484	1,956,250	60,043,300	4,192,134
1913	21,780,981	1,690,013	63,826,700	4,479,501

NOTTINGHAM.

[Consul Calvin M. Hitch.]

Only one firm of importance in this district is engaged in the manufacture of cotton waste. It makes engine waste only, and does a comparatively small business handling the waste of the lace and hosiery manufacturers located in this district. According to the information at hand, their output, which is practically the total output of the district, amounted during five recent years to approximately 20,000 tons. While statistics are not available, it is believed that the greater portion of this was sold to British concerns, both domestic and colonial, and the balance to various South American railways through their agencies in this country.

Waste is usually put up in 5-hundredweight (560-pound) bales. Terms vary according to the quantity purchased by the customer. In foreign business they are usually cash against documents, except when sold to the foreign concerns having agencies in this country. To these the usual terms of cash in one month are allowed.

SHEFFIELD.

[Consul John M. Savage.]

A considerable quantity of cotton waste is used by the numerous manufacturing plants in this consular district, but statistics as to the amount are not available. As there are no local cotton mills, the waste comes from Manchester, the center of the cotton industry of Great Britain, which is only 40 miles distant. The trade, as a rule, is supplied by local dealers, except in the case of large users, who buy direct. Terms are 2½ per cent, 30 to 90 days, according to the financial reliability of the purchaser.

OTHER CENTERS.

Bristol, Huddersfield, Hull, Plymouth, Southampton, and Newcastle-on-Tyne are markets of some consequence for cotton waste, linters, and batting. They are to be reached either direct or through the larger centers, such as Liverpool, Manchester, Leeds, and Nottingham. Dunfermline, Dundee, and Glasgow are potential markets for these products. Malta is an inappreciable market, owing to the fact that the demand is confined to waste for cleaning machinery of vessels. The island's supply comes from Great Britain.

NORTH AMERICA.

BRITISH HONDURAS.

[Consul William L. Avery, Belize.]

The cotton batting found in the stores of Belize is, properly speaking, cotton wadding, used almost exclusively by the tailoring trade. The amount imported by any one house does not exceed 144 yards, or 24 pounds, per annum, nor does the amount vary. For the entire trade the probable annual imports are estimated at 240 pounds. The country of origin is, and has been, Great Britain.

British Honduras is not a country where machinery is used to any extent, and the demand for waste is very small, but its use has increased of late years with the building of motor boats. The largest single consumer is the Government, for the railway, dredgers, boats, etc. The Electric Light & Ice Co. imports some 3,000 pounds yearly, and a local firm imports for its retail trade an average of 1,300 pounds per annum. The cotton waste used by the Government is ordered from England. The statistics for 1913 and 1914 show values of $148 and $168. Several mercantile houses import 100 or 200 pounds yearly for local customers, and from inquiry made by this office it may be stated that the imports of cotton waste into British Honduras for five years before the war (exclusive of Government supplies, ordered through the Crown Agents for the colony in England) averaged 5,500 pounds. Nine-tenths of this amount came from the United States. All of it was hard waste used in connection with machinery.

BRITISH WEST INDIES.

BAHAMAS.

[Consul W. F. Doty, Nassau.]

Cotton waste to the amount of almost 1,000 pounds is imported annually into the Bahamas from the United States for use in cleaning machinery. The importers are hardware dealers and maintain accounts current in the United States. Cotton batting is imported from England in small quantities for coat linings. It comes in packages of 12 sheets 4 by 8 inches in size. There are no imports of linters, and the islands export none of these three products.

BARBADOS.

[Consul Chester W. Martin.]

A very small quantity of cotton batting and cotton waste is imported into Barbados, but the customs do not classify these commodities. There are two local manufacturers and exporters of cotton linters, who ship to England. Statistics are not available, but from information at hand the exports for 1914 amounted apparently to 50 bales of 450 pounds each, a total of 22,500 pounds.

JAMAICA.

[Consul Ross Hazeltine, Port Antonio.]

There are no cotton mills in the Port Antonio consular district, nor is there any demand for cotton linters and batting. One of the leading dry-goods merchants in Port Antonio stated that he was entirely unacquainted with these products. There is, however, a small and steady demand for hard cotton waste, which is used principally for cleaning and polishing. No statistics of imports are available, and the only estimate that this office has been able to obtain is from the largest local importer. This firm imported and sold 2,500 pounds of cotton waste during 1914 and 1915, all of which came from the United States. It is packed in bales varying in weight from 100 to 325 pounds.

There is no demand for cotton linters, batting, or waste in the Kingston district.

TRINIDAD.

[Consul Andrew J. McConnico.]

The consumption of cotton waste in the colony of Trinidad and Tobago is very small, and is limited to the Government railway, the Trinidad Electric Railway in Port of Spain, and the sugar plantations in various parts of the island. Cotton linters and batting are not in demand and consequently not imported. None of the articles is manufactured from the small amount of cotton produced in the colony and hence none is exported.

It is estimated that the total consumption of cotton waste does not exceed 1,200 pounds per month. This estimate is based upon the average monthly sales of the leading importer, which do not exceed 500 pounds. The waste is imported from the United Kingdom and the United States, in bales of 100 pounds each.

OTHER BRITISH ISLANDS.

Cotton linters, batting, and waste are not imported into Turks Island. Cotton rags or other textiles are used for cleaning machinery in the district's seven factories; and even if these factories could be induced to use cotton waste, the amount required would be too small to justify an effort to obtain the trade.

There is no trade worth reporting in the colony of Bermuda in cotton linters, batting, and waste.

CANADA.

CALGARY.

[Consul Harold D. Clum.]

Cotton batting (or wadding) is in general use in the Calgary district. About 1,000 fifty-pound bales per annum are brought into Calgary, and approximately 2,000 bales into the Province of Alberta. Of this amount, only 400 bales, valued at $10 per bale, are imported from the United States direct, the rest being of Canadian manufacture. Cotton batting is put up in a form locally known as "batts." These batts are 6, 8, 10, and 12 ounce sizes and the number of batts to the bale is regulated according to the weight of the batt, the bale weighing 50 pounds. The weight of the batt in popular use is 8 ounces. Batting is used principally in making quilts.

Cotton waste is used principally by the various railway companies operating in this district and is supplied by the purchasing departments in Montreal and Toronto. The local hardware stores carry a small stock, obtained from jobbers in eastern Canada, to supply machine shops, which use the waste for both cleaning and packing. Cotton linters are not used in this district.

HALIFAX.

[Consul General Evan E. Young.]

Cotton linters are not used in this consular district, nor is any cotton batting imported. Cotton waste (soft), on the other hand, is imported in a fair amount. Shipments are usually made in 10,000 to 20,000 pound lots and the entire demand is supplied from Canadian and American sources. The bulk of the imports are made by one firm.

MONTREAL.

[Consul General William Harrison Bradley.]

Montreal is the center of Canadian cotton manufacture, and, with Toronto, of the jobbing trade as well. Canadian statistics, however, do not recognize cotton linters, and imports of cotton waste are obscured under the heading of "waste or shoddy from cotton, woolen, or other fabrics, or from yarn or thread machined, garnetted, or prepared for use," of which the total imports were 7,233,610 pounds, worth $466,438, in 1914, and 4,559,923 pounds, worth $288,850, in 1915. Of "cotton batts, batting, and sheet wadding," the imports during the five years ended in 1915 were valued as follows: 1911, $25,688; 1912, $24,845; 1913, $33,650; 1914, $35,237; 1915, $32,053.

The duty on cotton batting is 25 per cent ad valorem plus 7½ per cent war tax. On cotton waste it is 12½ per cent ad valorem plus 7½ per cent war tax.

Cotton waste is exported from Canada in considerable quantities, as appears from the following table of exports, by countries of destination, covering the four years ended in 1915:

Countries of destination.	1912		1913		1914		1915	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
United Kingdom	100,467	$1,994	249,353	$9,107	3,661	$289	231,625	$12,403
United States	667,429	25,584	876,273	25,849	482,251	21,356	1,369,448	60,132
Other countries	274,167	7,929	599,087	12,037	25,487	1,324	5,808	201
Total	1,042,063	35,507	1,724,713	46,993	511,399	22,969	1,606,881	72,736

A Montreal company is the largest contractor here for soft and thread waste. Some of the soft waste it manufactures into a thread waste for use upon machinery, and it exports large quantities to the United States and Europe. Its exports, which are said to amount to 90 per cent of the total, consist of soft mill waste, including fly, picker, soft sweeps, roller and card strip, as well as cotton thread waste, as it comes from the mills. The soft waste is packed in bales averaging 450 pounds. Thread waste is packed in 600-pound bales, except that for the convenience of local purchasers it is sometimes put up in 20 to 50 pound bales.

There are no exports of cotton linters, cotton batting, or cotton wadding from this district. Mattress makers are said to use most of the linters, which come to this district annually to the amount of 750 to 1,000 bales (averaging 450 pounds), nearly all from the United States. One company is said to receive 75 per cent of the quantity shipped from the United States and to use it in the manufacture of mattresses.

Cotton batting and wadding in Canada are nearly all made from linters and soft mill waste purchased from Canadian and United States mills, and are consumed in the Dominion. The goods are sold to jobbers. Batting is used principally as filling for blankets. Wadding is used, in the finer quality, as inner lining for women's opera cloaks, while the poorer grades are made into shoulder pads for coats, as well as padding for carriage tops, leather cushions, lounges, and the like. These commodities are packed in 25 to 60 pound bales and sold usually on terms of 30 days net.

Practically all the machinery used comes from the United States, and consists of openers, mixers, teasers, lappers, and cards.

ORILLIA.

[Consul M. B. Kirk.]

Five times as much American cotton batting is used in this district as compared with its only competitor, the home product. This is due to the fact that the American cotton batting is cleaner and better put up. The Canadian article is packed in bales, and the separate batts have a crushed appearance. The American batts, on the other hand, are packed, as a rule, in heavy cardboard cases reinforced with lath strapping, and the batts when removed from these cases present a much better appearance.

The waste used here comes in bales weighing 50 to 500 pounds. The small bale is of great convenience to the retailer, as he can order in small quantities, but generally a 300-pound bale is bought by the large manufacturers.

Although Orillia is the largest and most important manufacturing town in this district, it is estimated that barely 1,000 pounds of cotton waste of all sorts is bought from the retailers. This is usually bought in 5-pound lots.

QUEBEC.

[Consul G. Willrich.]

There are no statistics available showing the imports and exports of cotton linters, batting, and waste in this district. Information obtained from a dealer in waste, however, is to the effect that about 500 tons are used in this section annually, the greater portion imported from England. Cotton batting and wadding are used quite extensively, the former for making quilts, etc., the latter for padding coats and other garments. This is all obtained from a Canadian company.

SYDNEY.

[Consul Charles M. Freeman.]

Cotton batting is retailed in all the dry-goods houses, which usually obtain their stock from other distributing points in Canada, although a certain quantity has been purchased in England by a few of the leading houses. Cotton batting is packed in cases holding 60 pounds each. Very little, if any, is purchased direct from the United States, although practically all is of American origin. Credit terms are usually 60 days net.

Cotton waste comes into the district to be used for polishing, machine wiping, and packing, and is purchased by the iron and steel manufacturers, the railways, and the mining companies. While statistics for the district are not to be had, probably one-third of the total imports have until recently been obtained from Great Britain. A large part, especially that used on the railways and in the machine shops, has come from other parts of Canada, and it is estimated that $5,000 worth has come from the United States. Since the supply from England has been cut off, the British trade has reverted to Canadian manufacturers, and the supply has come principally from St. John, New Brunswick, and Montreal. The waste used here comes in bales of different weights, and there seems to be no standard; but the trade demands not less than 500 pounds, and the average weight is 700 pounds. Notwithstanding the fact that the supply from Great Britain has been cut out, the manufacturers of the United States have not gained the trade, except as sales of their product have increased at other points in Canada for distribution to users in Cape Breton.

VANCOUVER.

[Consul General R. E. Mansfield.]

Generally speaking, the requirements and demands of the market in British Columbia for cotton linters, batting, and waste are identical with those of similar localities in the United States. There is no local manufacture of these products, however, and figures showing the imports are not available. It is estimated that the annual imports of waste into British Columbia amount to 25 cars, while those of cotton batting and linters amount to 15 cars.

With few exceptions waste is used only for cleaning machinery, while cotton batting and linters are used by local factories in the manufacture of mattresses.

Waste is purchased for the local markets in bales ranging from 100 to 500 pounds in the proportion of about 20 of colored to 80 of white. Nearly all of it comes from the United States, but the market has recently been entered by eastern Canadian firms, who are endeavoring to capture the trade, particularly since the imposition of an additional duty of 7½ per cent as a special war tax, increasing the tariff rate to 20 per cent.

Cotton linters and raw cotton used in this Province are purchased by manufacturers direct from the exporter, principally from American houses, through agents in eastern Canada. The bales average 500 pounds.

In the manufacture of the cheaper grades of mattresses, jute from bags and clippings is substituted for cotton linters and raw cotton. This cheaper material is being obtained locally and from eastern Canadian mills. The only demand for batting in this Province is for domestic uses.

WINDSOR.

[Consul Harry A. Conant.]

A part of the supply of batting comes into the district directly from the United States, American factories maintaining resident agencies. The remainder is procured from the eastern Canadian wholesalers. The batting is largely used in the domestic manufacture of coverlets and other bedding. It comes in 50-pound bales of rolls weighing 16 ounces each, and is sold through the dry-goods stores. As this district is engaged extensively in manufacturing industries, it affords a good market for cotton waste, which is used for wiping machinery. The best grade is made in and imported from the United States. Some not so good is manufactured in Toronto, Canada. Linters are not handled in this district.

WINNIPEG.

[Consul General Frederick M. Ryder.]

Previous to the war linters were manufactured here to some extent, principally for home consumption. At the present time, it being impossible because of the increased cost to import the raw material, which formerly came from the United States, a substitute for the regular cotton linters is manufactured from jute and cotton pickings. The latter are a refuse procured from the textile mills and imported chiefly from the United States, though a small percentage comes from Europe. The refuse is first put through a cleaning machine to separate it from the dust and broken leaves, then through a carding machine. What is termed " shoddy batts " comes principally from Toronto, where a large factory has been established to manufacture this product. The machines used for this purpose are made by an American firm, each machine costing about $3,000.

A conservative estimate of the imports of linters into this consular district under normal conditions would be about 750 bales per annum for use in manufacturing mattresses and wadding. About 95 per cent goes into mattresses and 5 per cent into wadding for surgical purposes.

The largest consumer of cotton linters in this district is a Winnipeg firm, which practically controls the output of mattresses in the West. This concern manufactures all the linters and batting used in its factories, the raw material being imported principally from the United States. The grade of cotton used is a fiber known as " middling upland."

A large quantity of soft cotton waste is used by the three transcontinental railroad systems centering in Winnipeg. During 1915 one road consumed 100 bales of white cotton and 150 bales of colored cotton waste, while another used nearly 500,000 pounds per month; another about 250,000 pounds of colored and 100,000 pounds of white cotton waste. Most of this waste is bought through the local purchasing departments of the road, the remainder being supplied through the purchasing agents at the general offices of the companies in Montreal and Toronto. It is put up in bales of 500 to 600 pounds each.

The Canadian product comes principally from Montreal and Toronto, the foreign largely from the United States. The local hardware and machinery-supply houses carry waste in stock.

OTHER CANADIAN MARKETS.

The Canadian market is one of substantial promise. Other cities worthy of consideration are Cornwall, Kingston, Niagara Falls, Ottawa, and Toronto; while Campbellton, N. B., Charlottetown, P. E. I., Fort Erie, Fort William, Moncton, N. B., Prescott, Sarnia, Sault Ste. Marie, St. John, N. B., St. Stephen, N. B., Sherbrooke, Victoria, and Yarmouth are centers where profitable trade might well be developed.

COSTA RICA.

[Consul Samuel P. Lee, San Jose.]

Cotton linters, batting, and waste are not manufactured in Costa Rica, and there are no official statistics showing the quantities imported. Careful inquiry among merchants, however, indicates that approximately 20,000 pounds of cotton batting (or wadding) are consumed each year in Costa Rica. Most of this is of American origin, but one firm at least has purchased small quantities from France. The Costa Rican import duty is 1.1 cents per pound gross weight. Cotton batting is not in general use in tropical countries and is imported in small quantities only by the leading wholesalers at San Jose. Most of the cotton waste imported comes from the United States and is sold by the hardware dealers at San Jose. Some has been purchased in England, however.

Port Limon is a negligible field for the American exporter.

CUBA.

CIENFUEGOS.

[Consul R. M. Bartleman.]

There is a fair market in this district for cotton waste, confined to a few grades only, known locally as class A and class C, both white and colored. Class A waste is for use on machinery of vessels and is not carried in stock but is purchased to order only. Class C is carried in stock and is used for machinery of all kinds. Waste is packed in bales of 100, 200, and 600 pounds. From the subadministrator of customs it is learned that the imports of cotton waste in 1916 aggregated 299,034 pounds, valued at $19,360. The import duty on cotton waste imported from the United States is $0.70 per 100 kilos gross weight.

Moderate stocks of cotton waste are carried by hardware firms, who claim to supply some of the sugar mills of this district. Many of the mills, however, buy their waste direct, importing on their own account.

On January 1, 1915, a small factory was started here for making filled quilts and pillows. The machinery used consists of an American motor of 10 horsepower, three large and two small American sewing machines, a revolving machine, and one small hand-crushing machine. The last two machines were made in Habana.

The monthly consumption of filling for the different kinds of quilts amounts to about 19,000 pounds, making a total of 2,300 to 2,500 quilts. Twenty hands are employed. All the material used is American, such as raw cotton, cotton sheetings, and percales. The machinery mentioned can produce 5,000 quilts, consuming 40,000 pounds of filling or waste of cotton, silk, wool, or jute.

There are three similar factories at Habana and one at Santiago de Cuba.

HABANA.

[Consul General James L. Rodgers.]

There is a limited consumption of cotton waste in Cuba, mostly for wiping machinery, packing for mattresses, quilts, etc. Owing to the fact that the island has not yet developed large manufacturing interests, the demand is not great. Railroad shops, sugar-machinery plants, and mattress factories take the bulk of what comes in. Purchases are made direct from the United States and in annual requisitions.

DOMINICAN REPUBLIC.

PUERTO PLATA.

[Consul Frank Anderson Henry.]

No attempt is made to manufacture cotton batting and cotton waste locally, as the demand is almost negligible. Native cotton is sometimes used by individuals for making such articles as quilts, stuffing for pillows, etc.

Small quantities of cotton waste are imported from the United States, but as the use of machinery is very limited, the amounts consumed are negligible. Probably two to three dozen bales per year would cover the entire consumption of the district. The principal users are the two railroad companies. The bales of cotton waste average 150 kilos (331 pounds) each.

SANTO DOMINGO.

[Vice Consul Carl M. J. von Zielinski.]

Imports of cotton waste into the Dominican Republic have ranged in value from $450 in 1910 to $800 in 1913. There are no statistics for cotton linters or cotton batting.

According to paragraph 420, raw cotton, with or without seeds, pays a duty of $10 per 100 kilos (220.46 pounds) gross weight, while paragraph 421 provides a duty of $6 per 100 kilos gross weight on cotton waste.

Practically all the cotton grown is in the northern part of the island, and only a few attempts at cultivation have been made in this consular district. These have met with little success so far. No batting or waste is manufactured and all that is used is consequently imported. The chief consumers in this district are the sugar estates, which have large machine works.

FRENCH COLONIES.

GUADELOUPE.

[Consul Henry T. Wilcox.]

There is a small demand in Guadeloupe for cotton waste to be used in cleaning machinery, but there is no trade in linters or batting. The principal importer of waste states that prior to the war he imported annually from the United States about 3,000 pounds. Most of the sugar factories also import cotton waste.

ST. PIERRE-MIQUELON.

[Consul John J. C. Watson.]

Cotton linters, batting, and waste are not manufactured in this colony. A small amount of cotton waste, estimated at 3,000 pounds per year, is imported from France. It is put up in 120-pound packages. The usual credit is 30 to 60 days from date of invoice.

GUATEMALA.

[Consul Stuart Lupton, Guatemala City.]

Cotton linters do not appear as a separate item in the customs returns but are included with raw cotton. Imports of cotton batting and cotton waste into Guatemala during the years 1910 to 1914 were as follows:

Years.	Cotton batting.		Cotton waste.	
	Pounds.	Value.	Pounds.	Value.
1910	4,321	$702	996	$108
1911	10,814	1,370	3,836	306
1912	6,107	1,433	4,826	346
1913	6,287	1,336	227,270	14,686
1914	5,097	1,824	8,719	471

The duties leviable, according to the Guatemalan customs tariff, are as follows:

Cotton, with or without the seed, per kilo (2.2 pounds) gross weight, 3 centavos. As far as can be determined, linters and cotton waste come under this classification. Of this duty, 50 per cent is payable in gold and 50 per cent in the local currency. Thus the duty on 100 kilos would be 3 pesos, equal to $1.50 gold plus 1.50 pesos, a total of approximately $1.54 gold.

Cotton for interlinings, including batting, per kilo (2.2 pounds), net weight plus weight of inside wrapping, 40 centavos. This is payable half in gold and half in the local currency.

Waste is shipped in bales varying from 50 to 100 pounds in weight. Batting is shipped in various ways, often being wrapped in waterproof paper and burlap and baled. The terms usually granted by American firms to purchasers in Guatemala vary from cash payment to 90 days' credit. European houses often grant six or nine months.

The only power-driven cotton mill in Guatemala is located at Cantel, near Quezaltenango, the second city of the Republic. When operating at capacity it consumes some 2,000 bales of cotton per year, about nine-tenths of which is imported from the United States. The remainder is native grown, coming from the district around Santo Domingo, Retalhuleu, and Mazatenango, on the coast region near Cantel. A former president of the company, an American, first brought seed, and started and encouraged cotton cultivation, which is now quite successful; a good-quality cotton, with a fiber about 1¼ inches long, is obtained. This is ginned at Retalhuleu, baled, and shipped to Cantel. The linters are not removed from the seed. Within five recent years the company has brought in a shipment of some 50 bales of linters for mixing with the longer fibers in making coarse cloth and blankets for the Indians. There is one waste machine at the Cantel mill, which, it is understood, is used only in reworking the mill's own waste. This machine, like the rest of the equipment, is of English make and cost between $3,500 and $4,000. The product of the Cantel mill is consumed locally.

HAITI.

[Consul Lemuel W. Livingston, Cape Haitien.]

There is no trade in either cotton linters or batting in this consular district. A small quantity of waste is imported by individuals interested in machinery, and one merchant at Cape Haitien imports about 200 pounds a year. The electric-light company and the railroad stations at Cape Haitien and Gonaives use a certain quantity.

None of these articles is exported from this consular district, nor is there any machinery employed for their manufacture.

The trade in cotton waste in the Port au Prince district is insignificant.

HONDURAS.

CEIBA.

[Consul Walter F. Boyle.]

Statistics as to the imports of cotton waste, batting, and linters into this consular district are not available, but it may be estimated that the quantity of hard cotton waste imported for use in cleaning machinery in 1914 amounted to 7,000 pounds and the value to $400, while the imports of cotton batting were probably 1,000 pounds, with a value of $100. The imports of linters were negligible. The increase in the imports of waste and batting during the five years ended in 1914 was probably 25 per cent. During this time the total trade was with the United States and there was little danger of European competition.

This district exports no waste or batting or manufactures thereof, nor is it engaged in the manufacture of these articles for its own use.

Practically all the waste and batting is imported by the several American fruit companies, which operate under varying names their own steamship lines, railway lines, terminal facilities, plantations, and other industries in connection with their large interests. These companies maintain their own purchasing departments in the United States and consequently buy on a strictly domestic basis. The use of waste and batting other than by these corporations is so small that these articles can not be purchased at retail establishments.

Cotton waste is used only for cleaning machinery and the chief use of batting is for calking boats. Most of the boats make occassional trips to the British colony of Belize, however, and at such times purchase articles for their repair and upkeep. The fact that customs duties are much lower at that port almost eliminates the retail demand for batting in this district.

PUERTO CORTES.

[Consul John A. Gamon.]

Cotton linters and batting are not imported in this district, but absorbent cotton, for medical purposes, is brought in in small quantities—probably not exceeding $500 worth per year. Cotton waste is imported by the railroads and electric companies for engine-room purposes. Statistics are not available, but it is believed that the total imports of waste in this district would not exceed 15 tons per year. The demand would probably be steady. The customary sizes of bales are 100, 200, and 350 pounds.

Cotton is not grown in this district and there are no spinning or weaving industries. The local requirements for cotton products, therefore, will for some time to come be met by imports from foreign countries. The United States stands in a favorable position for this trade and will continue to do so with the present shipping facilities. With the extension of railroads and the establishment of factories there may be a fair demand for all three commodities.

MEXICO.

DURANGO.

[Vice Consul Homer C. Coen.]

As the great Laguna cotton section, which produces 80 per cent of the total cotton of Mexico, is situated in the Durango consular district, a considerable supply of cotton linters and waste is available for local consumption. The linters are a by-product of the two large soap factories at Gomez Palacio (Durango) and at Torreon (Coahuila) and practically all are sold within the country. There are five large cotton-goods factories within this district which manufacture the cheap, unbleached muslin known as "manta," much used by the poorer classes for clothing.

No recommendation can be made to American manufacturers to attempt at the present time to extend trade to Mexico in this line, because it is cheaper under existing conditions to use good cotton for all such purposes than to try to import from the United States. When conditions become normal, however, there will be a big demand for cotton batting for making mattresses.

There is an unsupplied demand for mattresses in this consular district. A mattress factory here, or a mattress made to sell very cheap, will find practically an unlimited market.

SAN LUIS POTOSI.

[Consul Wilbert L. Bonney.]

Cotton waste is used in the San Luis Potosi district to the extent of about 30 tons per annum in normal times. Before the opening of cotton mills in Torreon, Lerdo, Orizaba, and other cities in Mexico, it was imported from the United States, but the native article is now used. It is of inferior quality, not well-classified, and not especially clean, but in this article quality has not been considered of great importance. The waste from native mills is divided into two classes, white and colored. When soaked with oil it is used for fuel. It is stated that a cotton mill in Mexico produces a much larger percentage of waste than do mills in the United States.

Cotton batting is practically unknown in the San Luis Potosi district. Quilts are not used to any large extent, as blankets are much more popular, much cheaper, and of good quality. Cotton is not plentiful nor cheap in San Luis Potosi, and its place in stuffing is taken by straw, ixtle, and hair of local production.

Cotton linters are known only by name in San Luis Potosi. A small amount has been brought at times from Torreon soap factories to San Luis Potosi and used for stuffing mattresses. There is no market at this time.

OTHER MEXICAN CITIES.

Ensenada (Lower California), Nogales, and Monterey afford such limited facilities as to be hardly worthy of consideration in so far as American exporters of waste, linters, and batting are concerned. These markets can well be handled from the more important centers.

NICARAGUA.

[Consul Harold D. Clum, Corinto.]

Imports of cotton waste into Nicaragua amounted to 25,046 pounds, valued at $1,468, in 1914, as compared with 22,019 pounds, valued at $1,959, in 1913. Over 75 per cent of the total was obtained from the United States and practically all the remainder from the United Kingdom. No cotton linters or batting is used in this district.

Importers usually buy waste on open account. They also sell on open account as a rule, though small users pay cash. Waste is imported in 100 and 200 pound bales. It is used in this district for machine wiping and packing, the principal users being the railway company, the electric-light company, ice-making concerns, sugar mills, distilleries, coffee-cleaning establishments, and sawmills.

There are no manufacturers and exporters of cotton linters, batting, and waste in this district.

Bluefields offers so limited a field for development as to be negligible. Waste is the only article utilized and it is supplied to engine and machine wipers.

PANAMA.

[Consul General Alban G. Snyder, Panama.]

No cotton linters and batting are imported into Panama and only a little waste. Imports average 75 to 100 bales of 140 to 150 pounds each and are handled almost exclusively by the hardware firms of the city. They are purchased through New York commission houses.

SALVADOR.

[Consul General Henry F. Tennant, San Salvador.]

No official statistics are available showing the imports into this country of cotton linters, batting, and waste, but it is estimated that some 6,000 to 10,000 pounds of waste are imported yearly, all of which comes from the United States. There are no exports, as little cotton is grown here but about 1,000 pounds of waste are produced yearly and sold within the country.

SOUTH AMERICA.

ARGENTINA.

BUENOS AIRES.

[Vice Consul Eli Taylor.]

Cotton batting is used in a very limited way in Argentina, for the manufacture of quilts. Besides that imported, there is a small amount produced locally for this purpose. Very cheap quilts, which are made in large quantities, are generally padded with old rags. More than half of the quilts made and sold in this country, however, are made with wool, which is quite plentiful.

Cotton waste is used almost exclusively for wiping and polishing purposes in the factories and by the railroads. No distinction could be found between soft and hard waste. The railroads are probably the largest consumers of waste, and as these are in practically all instances British owned, with London offices, through which most of the railroads' requirements are purchased, it can readily be seen why Great Britain figures as the most important exporter of cotton waste to Argentina. Small quantities of waste are produced by the local cotton weaving and knitting mills, which, for the most part, consume their own production.

The import duty on cotton waste in Argentina is 25 per cent on a fixed valuation of $0.045 per pound, and on cotton batting for quilting purposes, 25 per cent on a fixed valuation of $0.227 per pound. These duties are increased by a surtax of 7 per cent of the valuation.

Cotton waste is generally received here in very tightly packed bales, containing 400 kilos (882 pounds).

The total imports of cotton waste into Argentina in 1914 were 4,441,313 pounds, valued at $200,471. For the four years ended in 1913 the quantity and value of cotton waste imported into Argentina, by countries, were as follows:

Countries.	1910		1911		1912		1913	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Belgium	87,964	$3,858			150,405	$6,597	104,621	$4,588
Brazil			107,945	$4,735	180,908	7,935	492,151	21,935
France			203,867	8,942	153,489	6,739	227,057	11,909
Germany	383,983	17,229	516,769	22,668	474,586	20,879	385,796	16,924
Italy	140,361	6,632	234,700	10,313	515,985	22,633	379,511	16,747
United Kingdom	2,485,388	110,507	2,765,505	122,045	3,954,992	183,006	3,601,717	165,775
United States	54,370	2,381	12,533	550	15,092	663	20,649	906
Other countries	333,874	13,942	26,116	1,153	45,151	1,973	37,614	1,206
Total	3,485,940	154,549	3,867,435	170,406	5,490,608	250,425	5,249,116	240,080

In the foregoing figures are included imports of waste made from hemp fibers, which, however, constitute a very small percentage of the total.

Of cotton batting for use in quilts, the total imports in 1914 were 67,986 pounds, with a value of $14,910. The following table shows the imports of cotton batting into Argentina, by countries of origin, in 1912 and 1913:

Countries.	1912		1913	
	Pounds.	Value.	Pounds.	Value.
France	19,443	$4,264	41,320	$9,063
Germany	7,090	1,546		
Italy			6,802	1,492
Spain	31,495	6,908	60,896	13,356
United Kingdom	17,065	3,743	18,009	3,960
Other countries	6,610	1,458	4,533	983
Total	81,703	17,919	131,560	28,854

So far as could be ascertained, there have been no imports or exports of cotton linters in Argentina.

ROSARIO.

[Consul William Dawson, Jr.]

There is a considerable demand for imported cotton waste in Argentina. During the five years from 1908 to 1912, inclusive, an average of 3,870,000 pounds was imported, of which over 70 per cent came from the United Kingdom and about 10 per cent each from Germany and Italy. About 20 per cent of the total imports in 1912 was received at Rosario. In 1913, 5,260,000 pounds of waste were imported.

In 1913 about 70 per cent and in 1912 about 60 per cent of imports were entered free of duty; that is to say, by railways or other public utilities enjoying the privilege of free entry. Waste imported by dealers pays the following duties: Washed woolen waste, 4.20 cents per pound; all other waste, 1.40 cents per pound.

Because a considerable number of firms handle imported waste, competition is very keen and profits are small. A leading local importer who has heretofore made a specialty of high-grade waste has decided that it is more advantageous to carry a good medium grade. All grades of waste are sold here, and even in the same grade the price varies with that of raw material.

While there is little reason to suppose that the railways, which purchase supplies in England wherever possible (this does not include State or French railways), will be open to American exporters of waste, there are large concerns, particularly sugar factories, that buy from local importers, and sometimes place orders ranging from 10,000 to 20,000 pounds. Waste is handled also by machinery-supply houses.

The usual terms are 90 days from arrival of goods. Waste is usually imported in bales of 300 kilos (660 pounds), securely wrapped in bagging and bound with steel bands or wire. Bales are subdivided into six lots of 50 kilos or three lots of 100 kilos, according to order, each lot being wrapped in bagging.

My informant states that, while he has no doubt that American manufacturers make high grades of waste, the samples submitted to him thus far from the United States have been inferior and generally contained hard fibers that made them unsuitable for fine machinery. American samples, he says, are apt to be too small. For sample purposes, at least half a kilo (1.1 pounds) should be sent. The greatest care should be taken to have orders correspond exactly with samples submitted.

BRAZIL.

RIO JANEIRO.

[Consul General Alfred L. Moreau Gottschalk.]

Cotton linters are the by-product of several cotton-oil pressing plants in this country. They are used for making felts, mattresses, and pads, and where the staple is sufficiently long, for spinning into the coarser yarns. Cotton batting, used in this country for blankets and quilts, is supplied by local establishments, and none, apparently, is imported.

Considerable quantities of cotton waste are imported, and in the export statistics the item "cotton residue or rags" is of some importance. Soft waste is used in this country for making carpet yarns and other cheap textiles. Fly waste and droppings, or motes, as well as the card strips and other long staple wastes, are most often used by the mills themselves, which run on many coarse numbers as well as the finer counts. The small quantities not consumed by the mills are sold to waste dealers. Hard waste is used almost exclusively for machine wiping.

The weight of the bales of linters, batting, and waste varies between 100 and 200 kilos (220 and 440 pounds). In the manufacture of hard waste "teasers," the well-known English machines, are used.

The foreign trade of Brazil in cotton waste is shown in the following table, by countries, for the years 1912 to 1915. "Cotton residues or rags" is the only item in the export statistics that can be considered as representing cotton waste.

Articles and countries.	1912		1913		1914		1915	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
IMPORTS (COTTON WASTE).								
France	54,375	$3,829	157,110	$10,544	53,718	$2,809	13	$1
Germany	120,110	7,943	168,863	12,027	77,435	4,106	....	....
United Kingdom	593,539	43,954	693,025	5,441	334,203	23,499	286,486	21,917
United States	31,348	1,872	60,471	4,776	100,965	9,350	201,816	24,451
Other countries	52,106	5,876	26,169	50,931	96,071	6,379	53,061	4,847
Total	851,478	63,474	1,105,638	83,719	662,392	46,143	541,376	51,216
EXPORTS (COTTON RESIDUE OR RAGS).								
Germany	231,717	16,591	137,791	7,224	40,492	2,178	....	....
United Kingdom	585,627	22,184	1,054,178	33,585	690,199	27,090	1,165,266	37,876
United States	....	....	2,357	76	4,429	343	6,614	100
Other countries	3,020	40	113,701	8,385	70,491	2,607	50,442	1,375
Total	820,364	38,815	1,308,027	49,220	805,611	32,218	1,222,322	39,351

OTHER BRAZILIAN MARKETS.

Bahia and Pernambuco are fair markets for cotton linters, batting, and waste, but separate statistics for these centers are not available. With the general development of the manufacturing interests of Brazil, as with other countries, the market for these articles will grow. But as yet they are not deemed sufficiently important to be listed separately in the statistics for Bahia and Pernambuco.

BRITISH GUIANA.

[Consul George E. Chamberlin, Georgetown.]

Cotton linters are unknown in the commerce of this consular district, and the market for batting and waste is so limited that there are no statistics of imports. There are no local manufacturers.

Batting is used almost exclusively for padding clothing, none being required for quilts because of the tropical climate. Cotton waste is used chiefly for polishing, machine wiping, and packing.

Until the beginning of the European war imports of batting and waste came from England, but at present all such purchases are made in the United States.

CHILE.

ANTOFAGASTA.

[Consul Thomas W. Voetter.]

Cotton linters and cotton batting are not imported into the northern part of Chile for industrial purposes, although antiseptic cotton for medical purposes is an article of regular use. Cotton waste is a standard article of import, coming from abroad in about the following proportions from the various countries of origin: Great Britain, 75 per cent; Germany, 12 per cent; United States, 7 per cent; Belgium, 4 per cent. Detailed statistics of imports are not available, but the total imports of cotton waste for the ports of the Antofagasta consular district during the calendar years 1912 and 1913 were as follows:

Ports.	1912	1913
Arica	$36	$3,907
Iquique	15,339	15,966
Tocopilla	5,203	3,447
Antofagasta	16,985	23,318
Taltal	6,815	6,322
Total	44,378	52,860

Waste is imported in bales of 5 hundredweight (560 pounds). The quality most in demand is hard waste of inferior grade, consisting of threads but with occasional fragments of fabric. No soft waste is imported. The waste is used only for cleaning machinery.

In the manufacture of mattresses and quilts no cotton is used at present. In the better grade they are stuffed with wool and hair, and old rope disintegrated is used for ordinary mattresses.

VALPARAISO.

[Consul General L. J. Keena.]

About 25 metric tons of cotton linters are imported into this country annually, principally from Peru. Some are received from the Province of Tacna, in the north of Chile (the only cotton-producing Province of Chile), but the entire production here is only about 11 metric tons, some of which is shipped to England. Practically all the linters imported are utilized by soap and candle factories. Unginned cotton is imported to some extent by mattress factories, in bales of 450 pounds, on 60 to 90 days' credit.

So little cotton batting is imported that it has not been possible to obtain any data on the subject. There are no exports of this product.

The principal uses of cotton waste are for machinery and engine wiping, and for packing journal boxes, etc. British waste has been the favored article, because it was lower in price, better packed, and cleaner than other waste. There are two sizes of bales, 250 and 100 kilos, respectively (550 and 220 pounds). The following table shows the imports of waste (almost entirely hard waste) into Chile, by principal countries of origin, in 1911, 1912, 1913, and 1914:

Countries.	1911		1912		1913		1914	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Belgium	8,234	$545					7,970	$527
France	11,905	788	6,834	$453	9,050	$589	4,563	302
Germany	56,669	3,753	450,664	29,845	169,897	11,251	67,053	4,440
Italy	11,056	736					17,008	1,826
Peru							10,417	690
Spain							5,390	357
United Kingdom	2,022,996	133,973	2,096,575	138,846	2,328,620	154,223	2,140,632	141,763
United States	3,175	210	5,699	377	53,748	3,559	61,960	4,103
All other			2,006	133	29,321	1,942		
Total	2,114,035	140,005	2,561,778	169,654	2,590,636	171,564	2,314,993	153,308

PUNTA ARENAS.

Punta Arenas imports only about 1 ton of waste annually, which is used in cleaning machinery. No linters are imported and no batting. The local production is negligible.

COLOMBIA.

[Consul Ross Hazeltine, Cartagena.]

This consular district does not import cotton linters or batting, and the imports of cotton waste are limited to small quantities supplied from the United States for the use of the local railway and a few small manufacturing industries. There are no exports of any of these products.

Cotton waste is imported in bales weighing 50 to 200 pounds. Owing to the fact that American manufacturers control this trade, it may be well to point out that their packing is far too heavy. The import duty, according to the Colombian customs tariff, is $0.053 per kilo, levied on the gross weight. The largest local importer informs this office that American cotton waste is packed in 3-ply bagging with four cotton ties—an unnecessarily heavy tare. This importer sells to small coasting vessels, and usually has less than six bales on hand.

ECUADOR.

[Consul General Frederic W. Goding, Guayaquil.]

As Ecuador lies in the Torrid Zone, the use of cotton batting is limited to that part of the country traversed by the Andes, and such use is not extensive. It is not manufactured locally. The only material known here as cotton waste (escorias de algodon) is used for wiping machinery. This is not on sale in the Republic, but is all imported direct by the establishments using it. Some cotton in bales is imported for use by the textile factories in the Quito district, but cotton linters are not known. Imports of cotton batting and cotton waste, by countries of origin, during the years 1909 to 1912, were as follows:

Articles and countries.	1909		1910		1911		1912	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Cotton batting:								
France	....	....	238	$34	....	....	....	....
Germany	401	$68	174	46	126	$21	....	....
United Kingdom	159	32	11	5	....	....	123	$78
United States	11	7	....	....	1,634	175	....	....
Total	571	107	423	85	1,760	196	123	78
Cotton waste:								
France	....	....	1,254	37	2,370	145	....	....
Germany	....	....	110	8	....	....	....	....
Spain	2,275	193	2,011	680	....	....	....	....
United Kingdom	99	9	165	36	185	29	....	....
United States	9,989	506	16,308	1,067	14,947	875	1,054	838
Total	12,363	708	19,848	1,828	17,502	1,049	1,054	838

PERU.

[Consul General W. H. Handley, Callao-Lima.]

This Republic produces more than 25,000 tons of raw cotton a year, consumes a considerable quantity in the manufacture of various grades of cotton goods, and exports raw cotton annually to the value of approximately $7,000,000.

Notwithstanding the large local production of cotton and cotton goods, however, 8,353 kilos of waste, valued at $8,131, were imported during 1913. Of this, 85 per cent came from Great Britain and the rest from the United States.

The imports have decreased in recent years, however, owing to the introduction of modern machinery for cleaning and combing. The Peruvian Corporation, which operates most of the railways of the country, with headquarters at Lima, is the principal consumer of waste in Peru. Small quantities are also used by two mining companies of Lima, iron works in Callao, and the Peruvian Steamship Co., of Callao.

There are only two factories in Lima equipped for removing lint from the seed. The other three mills sell their seed to these two. The only use made of lint here is in the manufacture of flour sacks, which are sold to the flour mills of Callao and Lima. Of the 133.073 kilos of lint exported in 1914, Great Britain took about 80 per cent, and the remainder went to France and Germany. The price of lint here, as with cotton, is regulated largely by the daily quotations on the Liverpool market. There is no demand at present for this material.

VENEZUELA.

LA GUAIRA.

[Consul Homer Brett.]

No importation or use of cotton linters or soft cotton waste is discoverable in the La Guaira district. Hard cotton waste for cleaning machinery is in the second customs class, paying duties and surcharges amounting to $1.37 per 100 pounds gross weight. In the statistics such waste is included with tow, of which relatively large amounts have been arriving recently. Persons qualified to express an opinion estimate that imports of cotton waste at all Venezuelan ports amount to not more than $1,000 per year. As all railways and many industrial establishments have the privilege of importing their materials free of duty they buy such supplies abroad, so that commercial imports are trivial in amount.

The duty on cotton batting ("algodon aplanchado") is $2.70 per 100 pounds gross weight. It is not possible to ascertain the amount of imports, as they are combined with fabrics of cotton in the list of imports by ports and countries and with raw cotton in the list of total imports. The consumption is small, however, for Venezuela is a warm country where stuffed or padded quilts are almost or quite unknown and there are no special or peculiar uses of cotton batting. It was necessary to visit three of the largest retail establishments before finding one that had batting in stock, and there the sample shown was of a poorer quality than is ever seen in the United States. It was light-brown in color, filled with dust and with specks that seemed to be flakes from cotton seed. It was similar to the "guata" used in the Canary Islands for wrapping bunches of bananas for shipment. The dealer stated that calls for the article were so rare that it hardly paid to carry it in stock.

Imports have hitherto come from Great Britain, but as New York is beginning to ship cotton goods to Venezuela, and as batting, because of the small quantity needed, is always bought and shipped with other goods, such imports may come from the United States in future. The possibilities of the market do not seem sufficiently great to justify any special efforts to obtain trade in either cotton batting or hard cotton waste.

OTHER VENEZUELAN CITIES.

Maracaibo and Puerto Cabello are such insignificant markets for cotton linters, batting, and waste that they need not be considered as potential fields for development for some years to come.

ASIA.

CEYLON.

[Vice Consul John A. Nye, Colombo.]

Imports of cotton waste into Ceylon, by countries of origin, during 1912, 1913, 1914, and 1915 have been as follows, in hundredweight of 112 pounds:

Countries.	1912		1913		1914		1915	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Cwt.		*Cwt.*		*Cwt.*		*Cwt.*	
China	....	....	....	....	80	$546	60	$406
India	820	$6,183	620	$5,221	744	5,141	1,181	8,459
Japan	100	1,108	50	385	130	1,101	20	337
United Kingdom	757	6,328	845	6,804	938	6,671	1,140	8,513
United States	....	....	2	83	....	....	....	....
Total	1,677	13,619	1,517	12,493	1,892	13,459	2,401	17,715

The customs returns of Ceylon do not differentiate between hard and soft waste. There were no imports of either cotton linters or batting between 1912 and 1915, and there are no exports of linters, batting, or waste.

Cotton waste is used almost entirely for motor cleaning and polishing, machine wiping, etc. The principal consumers are the large ironmongery stores, engineering works, and railways. The waste is imported usually in bales of 5 hundredweight (560 pounds), which is considered to be the most convenient size for handling. One firm imports it in galvanized-iron tanks of 400-gallon capacity, dimensions 4 by 4 feet by 4 feet, No. 13 or 14 gauge, with 18-inch cast manhole-cover for opening. These tanks are afterwards sold for oil-fuel storage purposes.

In 1890 an unsuccessful experiment was conducted in the growing of field cotton in Ceylon to supply a spinning and weaving mill located at Wellawatte, Colombo. This mill was built by an English company and operated by it for a short time. As local cotton growing proved unsuccessful, the mill was sold to a native company, which procures its supply of raw cotton principally from India. This mill has 10,000 spindles and 233 looms and produces cloth for the local native trade. All soft waste is respun by the mill for the manufacture of yarns, cotton blankets, sarongs, etc. The hard, or thread, waste is cleaned and sold under contract to the Ceylon Government Railway.

Ceylon tree cotton, or kapok, is exported in small quantities to the value of about $10,000 gold annually. The latest use for this material is in the manufacture of life belts. It is said to be more buoyant for this purpose than cork.

CHINA.

DAIREN.

[Consul A. A. Williamson.]

Cotton batting and cotton waste are imported into the Dairen district from Japan and, to a small extent, from Great Britain and Germany. Cotton linters are not imported as such, but probably come as raw cotton, which is received from native ports. A small amount is consumed locally as cushion, bed, and cloth filling, but most of it is reexported to Japan and Chosen (Korea). It comes in 400-pound bales without covering.

Cotton batting comes in 12-kwan (about 100-pound) bales, protected by straw wrapping, and is of several grades. The softer and thinner sheets are used for wadding in clothing, bedquilts, etc.

Cotton waste is classified as to color only, and no distinction is made between hard and soft waste. It comes in 40-kwan (about 330-pound) bales covered with gunny bagging. The demand is not large and the local stocks are small. The South Manchuria Railway Co., which is the largest user, buys large quantities at a time by special tender.

There are no cotton mills or manufacturers in this district.

Imports of raw cotton, batting, and waste during the years 1910 to 1914 were as follows:

Years.	Raw cotton.	Cotton wadding.	Cotton waste.
1910	$15,980	$18,615	$1,026
1911	26,414	2,098	33,075
1912	204,555	44,220	8,142
1913	$76,095	$36,521	$4,802
1914	107,078	36,284	640

HANKOW.

[Vice Consul Horace Remillard.]

Hankow is the logical center of the central China cotton industry, situated, as it is, at the confluence of the Han and Yangtze Rivers, which position enables it to tap the rich Han Valley cotton district. It also has good water transportation with Hunan and western Hupeh and its rail connection to the north with Peking places it in easy reach of Honan and even Shensi.

The cotton industry is not highly organized in Hankow, however, and this staple is little treated except in the household or by the petty merchant. The great bulk of raw cotton is exported, chiefly to Japan. There are no imports at Hankow of raw cotton, cotton linters, batting, or waste.

While there is no considerable export of waste, batting, and linters, there is a large local manufacture of wadded blankets and clothing from batting, which is a house and petty-shop industry. Every Chinese family has at least one cotton quilt, generally two, and sometimes three or four. The native winter garments are also lined with cotton, often a very inferior grade, which is covered with fine white cotton. Very rarely, down or silk is employed in rich families for making blankets for old or invalid persons. This industry is in the hands of the Hunanese, who have a monopoly of the shop trade in Hankow.

In the rural districts wooden gins of old-fashioned model have been employed, which turn out an inferior yellowish-white cotton for domestic consumption. In recent years, however, metal gins of Japanese and Chinese manufacture have been introduced, which turn out a fine white product much more suitable for quilting and wadding. When the cotton is ginned, the growers hire a man to beat it into fine shreds with an instrument for this purpose. When not employed this instrument is attached to the back of the cotton beater, who walks about the streets canvassing for trade. When the cotton has been finely beaten, yarn is entwined on both sides over the square piece in the form of a network and is called "mein shih," in contrast to ordinary raw cotton, or "mein hua" (literally, fine white flower). Covers for "mein shih" are usually made in two pieces, the upper casing usually being better in quality than the lower. Quilts for one person measure 4 feet 6 inches, for two 6 feet 6 inches. In the rural districts, people manufacture their own clothes and blankets. In Hankow the shopkeepers buy cotton from the sellers, have it beaten by their own employees, and prepare it for sale at retail.

HONGKONG.

[Consul General George E. Anderson.]

It is difficult to measure accurately the trade in cotton linters and cotton batting or in material of similar grade in Hongkong, since the larger share of the trade is among the poorer classes of Chinese and much of it is direct with rural producers of cotton. The uses to which all such materials are put by the Chinese are almost without number. The standard winter clothing of the great mass of the people is quilted with cotton batting or linters, kapok, or waste of any and all sorts. The use of linters or batting for such purposes is altogether a matter of price. With cheap cotton the possible use is almost without limit. Such materials are also used freely in the manufacture of cushions, the stuffing of artificial fruits used in Chinese worship, and to some extent in the manufacture of grave clothes and low-grade cloth.

Imports come from India, Japan, and north China through Shanghai, Japan furnishing most of the linters and Indian and Chinese cotton making up most of the batting. The materials come usually in three grades. The trade at present is at low ebb and it is doubtful whether more than 5,000 bales of the local size, aggregating perhaps 750 tons, are imported per year. In normal seasons the imports run perhaps 10,000 local bales, aggregating 1,500 tons. The first and second quality materials are packed in pressed bales of 250 catties (333⅓ pounds) each. The third-quality goods are packed in loose bales of 120 catties (160 pounds) each.

From time to time in recent years efforts have been made by American exporters to interest the trade here in a quilted cotton batting prepared for the manufacture of cotton comforts and similar articles. There is no question that such a material would be exceedingly serviceable to the Chinese in the manufacture of their quilted clothing and for similar purposes. There is a market for such materials in China nearly all the time, but the materials must be cheap and represent volume rather than high quality.

There is practically no demand here for cotton waste, except in so far as such waste can be adapted to the purposes indicated. Some waste for wiping machinery is used locally and for sale aboard ships, but the volume of trade is inconsequential.

Linters and cotton batting are handled in Hongkong by practically all dealers in piece goods.

MUKDEN.

[Consul General P. S. Heintzleman.]

Almost all the cotton marketed in Manchuria is made into cotton batting. The long, severe winters of this country, with a population of about 15,000,000 people, render the preparation of cotton batting a very important industry. There are no large factories catering to whole districts; each city and town has its factory or factories for its own needs and those of the immediate vicinity. Statistics do not show the countries of origin, but it is certain that practically all the imports come from South China.

A short-staple cotton is grown in South Manchuria, but probably not more than 4,000,000 pounds a year. The cities and towns of Chin Chou Fu, Liao Yang Chou, Kuang Ning Hsien, Hai Nan, Hsiao Hei Shan, Hsin Li T'un, and Cheng An Hsien are the chief centers in the cotton-growing districts of Manchuria.

The imports of raw cotton, cotton batting, and cotton waste into Manchuria for the five years 1909 to 1913 were as follows:

	1909	1910	1911	1912	1913
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Raw cotton	3,192	1,341	1,134	2,678	3,309
Cotton batting	....	10	11	....	....
Cotton waste	93	90	24	66	40
Total	3,285	1,441	1,169	2,744	3,349

The usual terms of credit are 16 days from date of delivery. Raw cotton is packed in straw-covered bales of 100 pounds each, and the cotton batting is packed in straw-covered bales of 70 pounds each.

Cotton batting is made from raw cotton and is used in lining clothing and for making bedding, mats, socks, shoes, cushions, etc. The better grade of cotton is used in clothing and coverlets, while the inferior grade is used in mattresses, screens for doors, and mats. In preparing cotton batting no modern machinery is used. Such as is prepared is done by primitive methods and by primitive contrivances. In many cases the work is done by individual families.

Cotton that is to be made into batting is spread out on a Chinese k'ang (bed). The appliances used for the process are a kung (bow), a wooden hammer, a flat bamboo basket, and a small stick. The kung is made of a heavy piece of bamboo, which is curved at one end and is strung with a string made of a sheep's intestine. This bow is fastened to the end of a split bamboo pole about 10 feet high by means of a rope that permits it to be moved with ease over the cotton. The wooden hammer is used to strike the bowstring, and the basket and the stick are used for edging. The basket is also used for pressing the cotton.

A half-catty (two-thirds of a pound) of cotton is spread upon the matting, and after about 12 minutes of teasing it is pressed, edged, folded, and tied. It is then ready for market. Each workman is able to make about 26 pounds of batting in one day of 12 hours.

SHANGHAI.

[Vice Consul A. Krisel.]

In spite of the fact that China is a cotton producing and manufacturing country, no statistics as to these industries are to be had. The Government keeps no statistics relative to cotton, except the cotton or cotton products exported or imported through the Chinese Maritime Customs. The published reports of the customs do not show any imports of either cotton linters or cotton batting from 1910 to 1914. There have been small imports of cotton waste from Hongkong, which ultimately were exported to some other Chinese port or to Japan. As the cotton mills heretofore situated at Hongkong have now been moved to Shanghai, these imports should, however, cease in the future.

The exports of cotton waste from Shanghai to foreign countries from 1910 to 1914 were as follows:

Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Cwt.			*Cwt.*	
1910	78,033	$222,802	1913	99,409	$376,614
1911	68,281	207,328	1914	80,527	307,119
1912	66,699	247,046			

The following table shows, by countries, the total exports of cotton waste from all China during the years 1911 to 1914. Quantities are stated in hundredweight of 112 pounds:

Countries.	1911		1912		1913		1914	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Cwt.		*Cwt.*		*Cwt.*		*Cwt.*	
Belgium	7,600	$20,512	5,403	$16,113	13,928	$48,090	7,521	$24,318
France	1,021	2,363	657	2,589	4,620	19,927	2,043	8,728
Germany	25,139	46,789	25,009	61,371	38,159	119,278	22,807	63,281
Hongkong	3,204	13,016	2,205	11,450	2,011	8,109	1,743	6,922
Italy	1,349	9,136	....	....	....	....	115	444
Japan	8,144	26,440	8,524	19,630	9,748	22,663	11,807	33,713
United Kingdom	2,283	14,533	7,220	50,658	5,732	38,338	8,521	53,736
United States	35	112	....	....	9	44	....	....
All other countries	13	195	462	3,022	597	4,013	401	1,739
Total	48,788	133,096	49,480	164,833	74,804	260,462	54,958	192,881

The China cotton waste is usually packed in grass bags of two sizes, 120 pounds and 180 pounds, respectively. The usual terms of credit are cash net. The hard waste is used for wiping mill machinery. The soft waste finds several uses in this district. The Japanese, who are at present taking most of the local cotton waste, make antiseptic cotton wadding from it. Cotton waste is also mixed with native-grown cotton to make quilts, mattresses, and comforters and is also extensively used for padding clothes for winter. Mill manufacturers, as a rule, do not sell their sweepings (No. 1 cotton fly) but use them for making coarse yarn. This is done by mixing these sweepings with raw cotton.

Before the war Germany was the principal purchaser of all kinds of waste in the local market, but lately Japanese merchants have been making large purchases.

OTHER CHINESE DISTRICTS.

Amoy, Antung, Canton, Changsha, Chungking, Foochow, Harbin, Nanking, Swatow, Tientsin, and Tsingtau are all small markets for cotton linters, batting, and waste. These cities are reached through the larger trade centers. The imports are used in padding heavy garments, in the manufacture of bed clothing in the cooler regions, and in the wiping of machinery wherever needed. The proverbial ingenuity of the Chinese is exhibited in the manner in which certain varieties of waste are utilized.

INDIA.

CALCUTTA.

[Consul General James A. Smith.]

There is no trade in cotton linters in any of the maritime Provinces in India; and no information relative to cotton batting is available except in the Madras Presidency, where it is known as cotton wadding. There are no exports of cotton batting; and the only imports are by retail firms in Madras, who use the greater part of the quantity imported as packing for articles that they manufacture. The quantity (in hundredweight of 112 pounds) and value of the cotton waste imported into India are shown in the following table, by countries of origin, for 1912–13, 1913–14, and 1914–15:

Countries of origin.	1912-13		1913-14		1914-15	
	Cwt.		*Cwt.*		*Cwt.*	
United Kingdom	3,274	$20,891	2,110	$13,241	1,897	$13,095
Aden and dependencies					2,693	9,840
Other British possessions	8	68	4	29	15	126
Total, British Empire	3,282	20,959	2,114	13,270	4,605	23,061
Japan	396	2,818	232	1,922	746	4,696
Other foreign countries	2	4	10	34	24	68
Total, foreign countries	398	2,822	242	1,956	770	4,764
Grand total	3,680	23,781	2,356	15,226	5,375	27,825

These imports were consumed in the different Provinces as follows:

Provinces.	1912-13		1913-14		1914-15	
	Cwt.		*Cwt.*		*Cwt.*	
Bengal	2,127	$12,248	1,393	$9,504	1,245	$8,487
Bombay	36	136	242	477	3,031	12,161
Sind	45	457	10	87	25	209
Madras	6	59	74	506	35	136
Burma	1,466	10,881	637	4,652	1,039	6,832
Total	3,680	23,781	2,356	15,226	5,375	27,825

Information in regard to the trade in cotton waste has been received from the collectors of customs in the various maritime Provinces of India, as follows:

Calcutta.—The mills importing cotton-yarn waste use it for mixing with Indian cotton for low-grade spinnings. The waste production of the local spinning mills is disposed of in retail lots for cleaning purposes.

Karachi.—The imports of cotton waste at Karachi during the last three years were chiefly on account of the East India Tramway Co. for its own use in cleaning machinery and packing axle boxes. There were no exports of waste from Karachi.

Rangoon.—There are no cotton-spinning mills in Burma, and supplies required for local use are derived mainly from India proper. In the fiscal year ended March 31, 1915, 4,807 hundredweight were imported from India and 1,039 hundredweight from foreign countries. Each package weighs 336 to 400 pounds. The waste is used principally for cleaning machinery.

Bombay.—A fairly large export business was done here by several German firms before war was declared, but little or none is being done in this line at present. When imported into India for manufacturing purposes waste is mixed with inferior cotton, and an inferior quality of yarn is made therefrom. Cotton waste is imported for this purpose only when the price of Indian cotton is very high.

As is well known, the cotton industry of India centers in the Bombay Presidency. From a prominent dealer in Bombay the following information has been received:

> The result of our inquiries regarding the manufacture in India of cotton linters and cotton waste is very meager. It is only certain that with the exception of one mill in Bombay, utilizing moderately Indian cotton waste, no plant is known to use at present any kind of similar material.
>
> We are informed, however, that on some rare occasions, and when prices permit, superior American waste is being imported by the Bombay, and especially the Ahmedabad, mills for the purpose of mixing with the inferior Indian short-stapled styles for producing counts of yarn below tens, which are used, we understand, in hand looms for the manufacture of coarse cloth. On the other hand, a minor portion of mill waste and cotton produced from damaged pods of kuppas (seed cotton) is bought for the manufacture of country-made carpets (durries); but the bulk of the production of all kinds of cotton waste and droppings, amounting, on an average, to 60,000 bales, is exported.

Madras.—The imports of cotton batting, linters, and waste into Madras Presidency from foreign countries have been almost negligible, consisting of a few hundred dollars' worth of cotton waste and yarn waste from the United Kingdom, Ceylon, and Germany. Cotton batting, which is known locally as cotton wadding, is imported in very small quantities and is not specifically declared in bills of entry. It is not exported. Cotton linters is a term not known locally.

Exports of cotton waste and yarn waste from Madras Presidency to foreign countries average several thousand dollars in value each year, this trade being with the United Kingdom and formerly with Germany. Exports to the latter country consisted of colored thread waste particularly. There are cotton mills of some importance in Madras and elsewhere in the consular district and the waste from these factories is utilized further in local industries, so that there is little surplus to export. The mills supply enough for local needs and there is generally no necessity for importation. Local mills formerly sent some waste to the Bombay Presidency for utilization there. Most of the soft waste, such as fly, motes, strips, etc., is bought from local mills by native firms for use in making up foundations for carpets.

The price of cotton waste is approximately two-thirds the price of raw cotton. It is sold only in wholesale lots made up into bales of 300 pounds each and is used for cleaning purposes. The usual trade terms are cash, except to approved customers, who are given up to 90 days' credit, the actual period being decided by mutual agreement.

Exports by sea of cotton waste from Madras reached a value of more than $44,000 in 1912–13 and 1913–14. In other years they have been much less; for example, $4,400 in 1910–11, $9,730 in 1911–12, and $4,700 in 1914–15.

JAPAN.

CHOSEN.

[Vice Consul Raymond S. Curtice, Seoul.]

Practically the entire crop of American cotton produced in Chosen is exported to Japan, the native cotton being manufactured by house industries for use primarily as cotton batting. No separate figures are given for cotton linters; and this product, if found at all, is doubtless included in the exports of raw cotton to Japan. I have been able to learn of no native uses for linters.

There are no cotton mills in Chosen. Consequently there is no production of cotton waste, and as the tables of imports make no separate mention of this article, its use is probably negligible.

The imports of cotton batting into Chosen for the five years ended in 1914 are shown in the following table, Japan and China being the only countries that participate in this trade:

Years.	Japan.		China.	
	Pounds.	Value.	Pounds.	Value.
1910	1,461,564	$144,311	4,488	$425
1911	1,929,312	198,039	2,112	258
1912	2,587,068	291,475	6,468	794
1913	2,525,556	301,764	5,544	650
1914	2,057,220	238,433	2,772	326

Cotton batting is sold in two forms: (*a*) In bundles of 400 packages, each package weighing 2.12 ounces; (*b*) in bundles of 400 packages, each package weighing 3.3125 ounces. Thirty to sixty days' credit is granted in wholesale transactions, and in certain cases as much as 90 days is given. Batting is used in Chosen primarily for the manufacture of the native winter clothing and of quilts.

KOBE.

[Consul George N. West.]

Cotton batting is manufactured in the Kobe consular district and is exported in considerable quantities. It is made in two qualities, the better of which is used for the wadded kimonos, worn by the Japanese in winter, and the second for bedquilts. The better quality is manufactured from cotton that is imported from Tientsin, China, or from the thick-fibered Japanese cotton. The second grade is manufactured from a mixture of fly cotton, made in the mills, and other waste cotton.

Cotton batting for export is usually packed in bales of 12 kwan (about 100 pounds) net weight. Transactions are generally done on letters of credit, but with known customers 30 to 50 days' credit is granted.

There are over 20 cotton mills in this consular district, where about 70 tons of cotton waste and 200 tons of cotton-thread waste are produced in a month. The first kind (cotton waste) is used in Japan for manufacturing guncotton and blankets, or else it is remanufactured into cotton. When the price of the local product is too high, some cotton waste is imported from Shangkhai, China, for making cotton blankets, etc.

As regards cotton-thread waste, about two-thirds of the total production is exported, the rest being consumed locally for polishing, machine wiping, packing, etc. Waste is packed for export in bales of 500 pounds net.

The exports from Kobe of wadding and waste during the five years from 1910 to 1914, inclusive, were as follows:

Years.	Cotton wadding.		Cotton-thread waste.	
	Pounds.	Value.	Pounds.	Value.
1910	58,837	$5,695	6,433,901	$294,560
1911	34,615	3,433	3,466,009	170,525
1912	50,889	6,209	5,771,193	250,735
1913	40,084	5,784	9,735,624	430,192
1914	68,837	8,062	11,002,897	447,039

There is no market in this consular district for cotton linters. About 15 years ago, a trial importation of a small amount was made by a cotton company of Osaka, but since then none has been imported. Practically all the raw cotton imported here is already ginned, so that no linters are produced for exportation.

NAGASAKI.

[Consul Carl F. Deichman.]

Nagasaki does not import or export cotton linters, batting, or waste in commercial quantities. A little waste comes in from time to time from other Japanese centers, and a little is shipped to the Chinese mainland occasionally. There is no local production.

TAIWAN.

[Consul Edwin L. Neville, Tansui.]

So far as can be ascertained, there are no cotton mills of any description in Taiwan (Formosa). There is no cotton grown, except a relatively small lot for experimental purposes, and unspun cotton is used only for wadding quilts or wiping machinery.

Statistics of imports of "ginned cotton and cotton wadding" into Taiwan, according to customs returns for the five years ended in 1914, are as follows:

Years.	Pounds.	Value.	Years.	Pounds.	Value.
1910	864,351	$91,092	1913	920,794	$111,145
1911	896,695	101,967	1914	996,096	115,557
1912	889,088	90,161			

All of these imports come from China and Japan. There are practically no exports.

YOKOHAMA.

[Consul General George H. Scidmore.]

Japan exports both cotton wadding and cotton waste but imports very little of these products. None of these goods are shipped into or from Yokohama, however, except as they may be received from Kobe for transshipment.

Exports of cotton wadding from Japan during the four years from 1911 to 1914, inclusive, by principal countries, were as follows:

Countries.	1911		1912		1913		1914	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
China	267,621	$22,378	256,961	$23,698	217,075	$21,457	211,680	$22,914
Hawaii	30,013	3,121	25,909	2,614	26,835	2,951	41,736	4,153
Kwantung Province	388,766	47,588	359,334	44,482	303,916	35,910	298,753	35,176
Russia, Asiatic	422,734	56,707	394,844	52,474	428,480	54,512	776,409	114,408
All other countries	25,097	2,740	12,832	1,621	20,458	2,875	22,605	189
Total	1,134,231	132,534	1,049,880	124,889	996,764	117,705	1,351,183	176,840

The following table shows the quantity and value of Japan's exports of "waste cotton and waste-cotton yarns," by countries of destination, from 1911 to 1914:

Countries.	1911		1912		1913		1914	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Australia	321,370	$20,156	424,414	$25,477	568,257	$34,682	1,105,889	$62,367
Belgium	286,222	12,112	1,189,533	49,589	....	....	1,720,696	54,030
China	305,486	17,340	309,105	14,482	424,729	21,161	272,112	16,204
Germany	603,900	25,290	645,096	14,370	2,666,313	101,777	3,467,401	128,411
Hongkong	1,270,280	64,322	679,765	38,301	889,865	42,827	1,697,069	65,565
Kwantung Province	547,177	17,589	359,889	15,458	698,293	29,654	470,838	20,745
United Kingdom	261,139	19,222	517,785	29,588	1,208,714	75,138	1,024,179	56,585
United States	1,321,869	50,901	1,376,833	49,067	1,340,633	51,011	727,797	23,018
All other countries	393,879	20,589	551,105	24,458	550,361	25,170	1,104,822	45,104
Total	5,311,322	247,521	6,053,525	260,790	8,347,165	381,420	11,590,803	472,029

STRAITS SETTLEMENTS.

[Consul General Caspar L. Dreier, Singapore.]

Imports of cotton "wick and waste" are received in the Straits Settlements chiefly from the United Kingdom, though some are shipped from Hongkong, British India, Germany, China, and, in still smaller quantities, from other countries. During the years 1910 to 1914, inclusive, the value of such imports, by principal countries of origin, was as follows:

Countries.	1910	1911	1912	1913	1914
United Kingdom	$29,647	$42,329	$47,707	$48,988	$31,937
British India	....	1,356	2,588	1,959	1,243
Hongkong	2,920	4,243	2,181	3,858	3,787
Germany	4,995	4,300	6,596	3,924	1,349
China	181	187	1	9,016	8,568

There are no cotton-manufacturing establishments in the Straits Settlements, nor is there any native cotton.

TURKEY.

SMYRNA.

[Consul George Horton.]

There are no Government statistics showing the annual imports and local industry in cotton linters, batting, and waste in Asiatic Turkey. From information drawn from competent sources, however, the consumption in the Smyrna consular district is estimated to amount to 424,500 to 707,500 pounds of cotton linters, 111,200 to 139,000 pounds of batting, and 45,000 to 48,000 pounds of waste. Of the yearly consumption of linters 227,200 pounds are of native manufacture, and the remainder is imported principally from Italy and Malta. There is no local manufacture of batting; this article is imported from Italy and England.

Waste is both imported and manufactured locally. There are in Smyrna two spinning factories, one producing 110,000 pounds of soft waste and 26,400 pounds of thread waste annually, and the other having a yearly output of 22,000 pounds of soft waste and 3,300 pounds of thread waste. The thread waste is sold locally, but the soft waste is exported to Europe. The imported article is furnished exclusively by Italy, and amounts to 17,600 pounds a year of thread waste and 22,000 pounds of soft waste. Part of the waste produced by the factories here is consumed by them and part is sold to the railway companies, while the waste imported from Europe is used by the mills and in the manufacture of mattresses.

OTHER TURKISH CENTERS.

Aleppo, Bagdad, Beirut, Harput, and Trebizond offer small inducements in the way of American trade in cotton linters, batting, or waste. There are few dealers and no importers.

OTHER ASIATIC COUNTRIES.

Reports received from British North Borneo, French Indo-China, Persia (Teheran), and Siam indicate that these countries offer no prospect of any considerable trade in cotton linters, batting, or waste.

AUSTRALASIA.

AUSTRALIA.

MELBOURNE.

[Consul William C. Magelssen.]

The uses of cotton waste in the Melbourne consular district are practically confined to machinery cleaning, wiping, etc., and of cotton batting or wadding to upholsterers' and tailors' work and other ordinary purposes. Values only are recorded by the Australian customs authorities. The imports of cotton waste and waddings and cotton wool into the States included in the Melbourne consular district are shown in the following table covering 1913 and the preceding four years:

Articles and States.	1909	1910	1911	1912	1913
Cotton waste:					
Victoria	$50,466	$52,154	$62,097	$84.123	$53,687
South Australia	13,767	18,819	23,812	22,551	29.851
Western Australia	11,986	22,702	20,386	33,345	23.539
Total	76,219	93,675	106,295	140,019	107,077
Waddings and cotton wool:					
Victoria	9,456	11,835	13,641	25,871	14,522
South Australia	3.703	4,687	3,557	5,163	5,061
Western Australia	2,248	2,852	2,745	2,389	3.377
Total	15,407	19,374	19,943	33,423	22,960

These imports, with the exception of about one-seventh from Japan and a very small amount from the Straits Settlements, were entirely the product of English factories. Recently, however, Japanese waste is said to have come upon this market in much larger quantities, owing to a substantial increase in English prices and the irregularity of shipments from that country.

Cotton waste is free of customs duty. In waddings local manufacturers operating under the protection of a customs duty of 15 per cent on English goods, increased to 20 per cent on the products of other countries, appear to have the market.

The opinion of all dealers interviewed on the subject of this report is that the absence of American trade in these lines is due solely to price, and that unless British prices can be met there is little prospect of business being done.

SYDNEY.

[Consul General J. I. Brittain.]

Imports into New South Wales of " wadding and cotton wool " increased from about $16,000 in 1909 to $28,000 in 1912 but dropped to $22,000 in 1913. These imports came almost entirely from England. Imports of cotton waste into New South Wales reached the maximum of $107,000 in 1913. This represented a steady rise from 1909, when the value was $70,000. By far the largest part came from England, but Japan also contributed an increasing quantity, which in 1913 amounted to about one-fifth.

OTHER AUSTRALIAN MARKETS.

Newcastle is a small market with relatively insignificant takings of cotton linters, batting, or waste. The market is reached through Sydney and Melbourne.

The consumption of these articles in Tasmania is so limited that the aggregate at Hobart is not deemed worthy of separate mention.

NEW ZEALAND.

[Consul General Alfred A. Winslow, Auckland.]

There are no imports of cotton linters or cotton batting in New Zealand. A small quantity of soft cotton waste, ranging from 500,000 to 720,000 pounds per year, is imported from England in bales of 500 pounds each. It is entered free of duty, but is subject to the usual primage tax of 1 per cent ad valorem.

AFRICA.

ALGERIA.

[Consul Dean B. Mason, Algiers.]

According to the statement of importers of cotton waste, confirmed by information from the customhouse, cotton linters are not imported into Algeria. Cotton batting and cotton waste (apparently all hard waste) are imported from France, where they are produced by the large cotton factories at Rouen and other manufacturing centers. There are no cotton factories in Algeria, and the small quantity of cotton grown in this country, which amounted to 303,797 pounds in 1913, is shipped in bales as raw cotton to French factories.

Imports of cotton batting and cotton waste into Algeria during the years 1910 to 1914 were as follows:

Years.	Cotton batting.		Cotton waste.	
	Pounds.	Value.	Pounds.	Value.
1910	65,036	$17,177	95,671	$3,474
1911	77,602	19,493	112,215	3,667
1912	113,538	26,248	145,726	4,632
1913	70,107	17,370	119,931	4,053
1914	91,932	....	74,295	....

Cotton batting is generally ordered directly from France by mercers and druggists and is put up in packages of 1 to 5 kilos. Cotton waste is usually imported in packages of 100 kilos. At present cash payments are exacted, but under normal conditions credits of 30 days or of 3 months are allowed after delivery of goods. Cotton batting is used for lining garments, coverlets, etc. Cotton waste is used for cleaning machinery in factories or vessels. Algeria is not an industrial country, however, and the demand for cotton waste is comparatively small. It is generally purchased directly from French manufacturers or their agents.

CANARY ISLANDS.

[Consul George K. Stiles, Teneriffe.]

The import trade in cotton wadding in the Canary Islands is of considerable importance. "Guata," as the wadding is called locally, is extensively used in packing bananas for exportation to England, Spain, and France. Cotton linters have never been imported here, and of cotton waste (soft) not more than 30 tons a year is consumed. This is imported from Manchester, England, packed in bales weighing 112 pounds. About 5 tons of hard waste, produced in the islands as a by-product of the drawn work manufactured by hand in Orotava, Teneriffe, and Santa Cruz, La Palma, is used for wiping machinery.

The cotton wadding for banana packing is made up and packed in the following manner: One hundred and twenty pieces of wadding to each bale; each piece 12 yards long, weighing 22 ounces; width of wadding, 34 to 35 inches; total length in bale, 1,440 yards. These bales are wrapped in stout canvas coverings and are strongly compressed with thin iron bands. [See report entitled "Cotton Wadding for Canary Islands," in Commerce Reports for Dec. 27, 1915.]

The imports of cotton wadding and cotton waste into the Canary Islands during the years 1911 to 1914, inclusive, are shown by countries in the following table. The official statistics do not differentiate between wadding and waste, but private inquiry shows that about nine-tenths of the imports are wadding, or "guata."

Countries.	1911		1912		1913		1914	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Belgium	2,407	$297	45,599	$5,629	6,086	$799	11,616	$1,544
Germany	45,619	5,622	8,902	1,099	110	14	202	27
Netherlands	....	....	5,661	699	....	....	....	....
Spain	2,711	334	3,218	397	1,230	161	1,588	209
Sweden	....	....	....	....	....	....	7,700	1,013
United Kingdom	598,070	73,719	537,054	66,292	580,527	76,231	618,200	81,446
United States	....	....	....	....	....	....	1,584	194
Total	648,807	79,973	600,434	74,116	587,953	77,205	640,890	84,433

LIBYA.

[Consul W. Roderick Dorsey, Tripoli.]

Tripoli is not a cotton-growing district, and the fiber is not imported in the raw state; consequently there is no production or export of cotton linters, batting, or waste. Nor are linters or batting imported, but some waste, all of it hard, is brought in for use in connection with machinery. It comes from Italy packed in bales of 150 kilos (330 pounds) and is principally white, although in some instances the majority of threads are colored.

Prior to the Italian occupation in 1911 machinery was rare and imports of waste negligible. New machines of various kinds have been installed, and an increase in waste consumption has naturally followed. There are no statistics as to quantity or value, but estimates indicate that the demand is still unimportant. Annual imports average about 10,500 kilos (23,100 pounds), valued at 6,700 lire ($1,300) a year, exclusive of the amount used by the Government for railway and other purposes, which is requisitioned from supply depots in Italy. There are about 125 miles of railway in Tripolitania, operating about 20 locomotives and about 200 freight and passenger cars. There is no chance of great expansion in the demand for waste. Tripoli is not a manufacturing center and, in the absence of mineral and other raw material, as well as fuel, is not likely to become important in the waste trade.

All the principal consumers import direct from Italy. The larger firms have had supplies sent by their own houses in Italy and terms have been a matter of accounting between them. Those who have imported to sell again have bought in such small quantities that terms were usually cash.

MADAGASCAR.

[Consul James G. Carter, Tamatave.]

The customs statistics do not record any imports of cotton linters, but small quantities of batting and waste are imported into Madagascar. Such shipments have ranged during 1910 to 1914 from 3,400 to 13,300 pounds of batting and from 2,000 to 10,000 pounds of waste, the largest amounts having been received in 1912 and 1913.

The cotton batting imported into Madagascar is confined to the kinds used for medicinal and surgical purposes, there being no demand for that used for manufacturing or industrial purposes. "Hydrophile," or absorbent cotton, is used mostly for washing wounds, etc., and is perhaps in greatest demand. The local administration often requires this class of cotton for use in hospitals throughout the island. Carded cotton is also used to some extent in the hospitals and by local physicians for dressing wounds and other surgical and medicinal purposes. Medicated or impregnated cotton may be found in the local pharmacies, but there is practically no demand for this article.

The cotton for the Government, which represents the greater portion of the entire amount imported, is either purchased through adjudication or sent out direct through the purchasing office of the Department of Colonies in France. These orders or contracts usually stipulate that the goods shall be of French make. The small quantity of this cotton handled otherwise by the trade is carried by the different druggists throughout the island. Batting is not carried by wholesale merchants for sale to the local trade. The individual druggists usually place their orders direct, through French commission houses, on open account or credit of 90 days.

The various hardware dealers in the principal towns of the island usually carry in stock about 300 to 350 pounds of this merchandise in order to supply occasional demands, which, in Tamatave, amount to about 75 to 100 pounds per month. This material is also purchased by local firms through Fench commission houses.

UNION OF SOUTH AFRICA.

CAPE TOWN.

[Vice Consul John W. Dye.]

Cotton linters are practically unknown in this country, apparently not being imported, manufactured, or used. Cotton batting is imported on a small scale, principally for the use of tailors and makers of bedding, but there are no separate statistics for these imports.

Imports of cotton waste into the Union of South Africa during the years 1910 to 1914 are shown, by countries of origin, in the following table:

Countries.	1910	1911	1912	1913	1914
Belgium	$14,881	$1,031	$116	$822	$19
Germany	23,587	52,874	41,608	51,721	22,940
India	1,182	1,445	1,260	350	1,070
Italy			170		
Japan	306				593
Netherlands		5,810		14	
Norway		141	199	233	564
United Kingdom	77,379	97,407	89,417	90,867	93,603
United States	189	822	1,708	1,109	12,424
Total	117,524	159,530	134,478	145,116	131,213
Reexported to all countries			472	467	696

These figures indicate that most of the trade is in the hands of England, with Germany second. Imports from the United States became important only in 1914, when they amounted to about 11 per cent of the total. English waste comes principally from Manchester.

Cotton waste is generally imported in bales weighing approximately 560 pounds, or four to the ton. The usual terms of sale are cash against documents, with 2 per cent discount. It is used in this country principally for wiping machinery and for packing, and the railroads and mining companies are the biggest consumers. The demand is almost entirely for cheap, colored, hard waste.

DURBAN.

[Consul William W. Masterson.]

The principal districts in South Africa where waste is used to any extent, according to the leading importer of Durban, are the Rand, where it is used in the high-class machinery of the gold mines, and Natal, where quantities are used in the sugar refineries, other manufacturing industries, and the railroads. The waste for the railroads is generally imported by this large dealer by contract into Durban, and from here distributed throughout the Union. The waste imported for use in Natal is of a low grade, classified as colored waste, and contains a mixture of all sorts of colored material.

There has been a small demand here for waste for special filtering purposes, composed entirely of linen thread, but the demand is diminishing, as filter pads specially made are now coming into use.

The waste used in this district comes in compressed 5-hundredweight bales, but occasionally it is packed into five bags containing 1 hundredweight each and then pressed into bales. As the trade in waste is comparatively small, most of it being secured by contract for a term of years, the business here is in the hands of one man.

JOHANNESBURG.

[Consul Edwin N. Gunsaulus.]

Cotton waste is used in large quantities in the gold mines of the Witwatersrand, as well as in garages, machinery concerns, and repair shops. Its greatest use is in the cleaning and polishing of metal parts, and in some instances for packing around frictional parts of machinery, in combination with oil or lubricating grease. It is imported in bales of 500 pounds.

There are no manufacturers of cotton waste in the entire Union of South Africa or in Rhodesia, the demand being met by imports principally from the United Kingdom, Germany, and the United States. In the statistics there is no differentiation between hard and soft cotton waste.

According to the best statistics obtainable, the consumption of cotton waste in the mines of the Transvaal during 1914 was as follows:

Items.	Coal mines.	Diamond mines.	Gold mines.	Other mines.	Total.
Pounds	34,333	17,074	605,258	12,726	669,386
Value	$3,032	$1,582	$55,911	$1,260	$61,785

In the Orange Free State the consumption of cotton waste in the diamond and coal mines in 1914 amounted to 35,473 pounds, valued at $2,871.

Imports of cotton waste into Southern Rhodesia for the five years ended in 1914, with the countries of origin, were as follows:

Countries.	1910	1911	1912	1913	1914
Germany	$510	$184	$145	....	$34
India	2,107	....	....	....	2,408
United Kingdom	6,832	4,880	12,302	$4,219	3,951
Total	9,449	5,064	12,447	4,219	6,393

The terms of purchase usually extended to importers of cotton waste are cash against documents, with discount of 2 per cent or more, or a time credit of 30 to 60 days, according to the standing of the customer.

The exports of cotton waste from South Africa are insignificant; the total value of exports from the Union in 1912 was $470; in 1913, $465; and in 1914, $694. All of this, except the little taken for ship's stores, was shipped to Portuguese East Africa and the Belgian Kongo.

Cotton batting (or wadding) is imported and used in comparatively small quantities in South Africa, about the only users being tailors, upholsterers, and cap makers. All of this product hitherto imported has come from the United Kingdom. There are no statistics giving the imports of batting into the Johannesburg consular district or into the country as a whole.

The term "cotton linters" is unknown in a commercial sense by importers and exporters here. No product of this name, in either its manufactured or unmanufactured state, is marketed in this district or exported to other countries, as far as can be learned.

OTHER AFRICAN COUNTRIES.

Reports received from British East Africa and the Kongo indicate that there is little trade in cotton linters, batting, or waste in Mombasa or in Boma. The trade in the Monrovia district of Liberia and in Tangier, Morocco, is likewise insignificant. Portuguese East Africa has a small business in these articles in the district of which Lourenco Marques is the center.

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